FILE NO. 120-9902

TOSHIBA

SERVICE MANUAL

VIDEO CASSETTE RECORDER

V-729B, V-709B, V-429B
V-229B, V-219B, V-209UK
V-729EG, V-719EG, V-429EG
V-229EG, V-219EG, V-209EG
V-729F, V-609F, V-429F
V-419F, V-229F, V-219F
V-729W, V-429W, V-209W

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CONTENTS

1. Precautions

2. Reference Information

3. Product Specifications

4. Disassembly and Reassembly

5. Alignment and Adjustment

6. Exploded View

7. Replacement Parts List

8. Block Diagrams

9. PCB Diagrams

10. Schematic Diagrams

1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all pretective devices, including : control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1-1) :
   Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

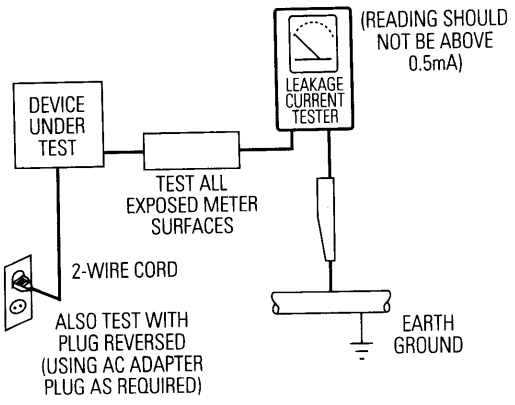

(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METER SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known erath ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

6. Antenna Cold Check :
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong.
   Connect the other lead to the coaxial connector.

7. Some semiconductor ("solid state") devices are easily damaged by static electricity.
   Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

8. Immediately before handling sny semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

9. Design Alteration Warning :
   Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors.
   Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

10. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

11. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

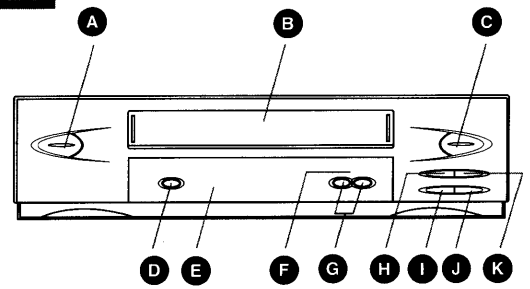
12. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

13. Product Safety Notice :
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

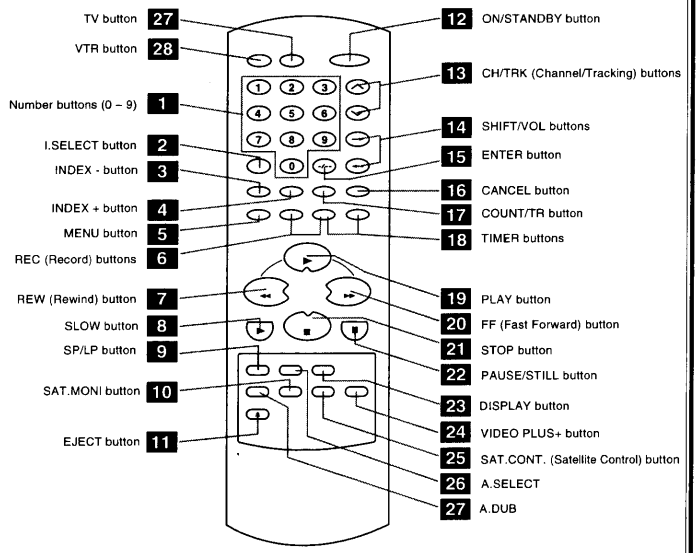
    Components that are critical for safety are indicated in the circuit diagram by shading, (⚠ or ⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1 3 INTRODUCTION
IDENTIFICATION OF CONTROLS

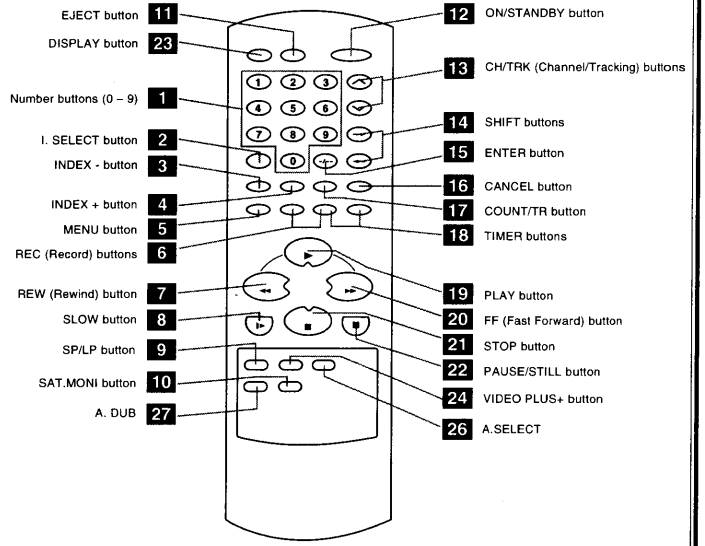
Front Panel



Remote Controller (V-729B)

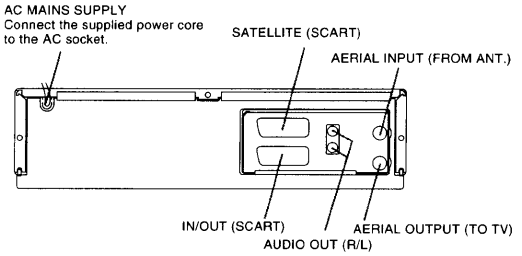


Remote Controller (V-709B)

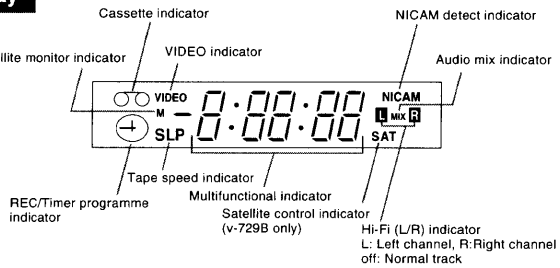


- A ON/STANDBY button
- B Cassette compartment
- C EJECT button
- D REC (Record) button
- E VTR display
- F Remote sensor
- G CHANNEL buttons
- H PLAY button
- I REW (Rewind) button
- J FF (Fast Forward) button
- K STOP buttons

Rear Panel



VTR Display



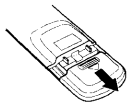
INTRODUCTION

1 4 HOW TO USE THE REMOTE CONTROLLER

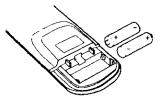
This section explains how to get ready for remote controller operation.

Setting up the Remote Controller

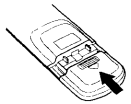
1 Open the battery compartment lid on the rear panel.



2 Install 2 batteries (R03 size) following the polarity diagrams.

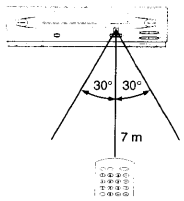


3 Close the battery compartment lid.



4 Point the remote controller at the VTR and press the buttons within the operating range as illustrated.

Distance: within about 7 m from the front of the remote sensor
Angles: within about 30° in every direction



Notes on Batteries

- The life of the batteries is about 1 year depending on the conditions of use.
- If the remote controller does not operate correctly, replace all batteries with new ones.
- Do not dispose of the batteries by fire.
- If the remote controller is not to be used for a long period of time, remove the batteries to avoid possible damage from battery corrosion.

Caring for the Remote Controller

- When using the remote controller, press the buttons at intervals of about 1 second to ensure the correct mode of operation.
- Keep the remote controller away from extremely hot or humid places and avoid sharp impacts.
- Do not expose the remote sensor of the VTR to a strong light source such as direct sunlight or illumination.
- Be careful not to spill water on the remote controller or to place it on anything wet.

TOSHIBA TVs Control (V-729B Only)

The remote controller can control TOSHIBA TVs.

Press the TV button to set the remote controller operating your **TV**. 27

Point the remote controller at your TOSHIBA TV and use each button listed below to make sure that the TV is operated correctly.

ON/STANDBY	To turn the TV on or off.	12
CH	To select TV channels in the upper or lower direction.	13
VOL (Volume)	To adjust the sound level.	14
INPUT SELECT	To select an external source such as a VTR.	2
Number buttons/ ENTER button	To select TV channels. Way of use may differ with models of TV. Check how they work on your TV. Ex. To select channel 3: • 0→3 • 0→3→ENTER • ENTER→3 To select channel 16: • 1→6 • 1→6→ENTER • ENTER→ENTER→1→6	1 15

Important
Some TVs may not respond to all the operations above, or may not be operated at all with this remote controller. In this case, operate your TV with its own remote controller.

2 1 *AUTO SET UP*

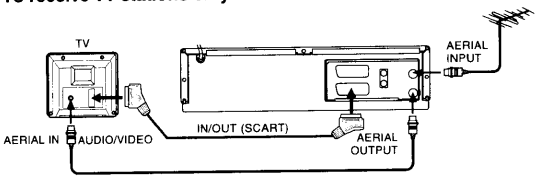
AUTO SET UP

The Auto Set Up function automatically tunes in TV stations, sets the clock and sets the RF out channel. All you have to do is to connect the VTR to the main antenna aerial and your TV, and then plug the power cord into the mains outlet.

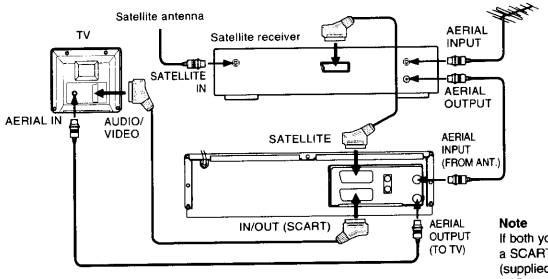
Auto Set Up

1 Connect the VTR to your TV with an aerial cable from the main antenna.

To receive TV stations only



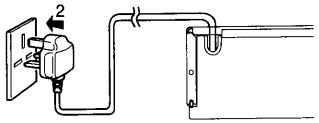
To receive satellite channels as well



Turn on the satellite receiver and tune to SKY ONE.

Note
If both your TV and satellite receiver have a SCART socket, use a SCART cable (supplied for V-729B only) to connect the VTR.

2 Plug in the VTR to start its Auto Set Up.
The display will flash "AUTO" for a few minutes.

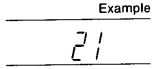


VTR display

The Auto Set Up is being carried out.

3 When the VTR display shows an RF out channel, press the **MENU** button.

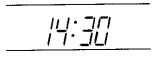
Example



MENU

The VTR automatically sets one of isolated vacant channels between 21 and 69 as the RF out channel.

Example



When the auto set up completes, the display will show the time, e.g. "14:30".

Notes
- The Auto Set Up procedure above is available only on the first time you connect this VTR. See pages beginning from 36 for the next time.
- If you press the CANCEL button, the Auto Set Up is cancelled.
- If the VTR display shows "0:00" after flashing, no stations are stored. Make sure that the VTR and the TV are connected correctly, and perform "MANUAL SET UP" (page 36) to store your stations and set the clock.
- The TV stations in tuning range numbers 2 and 3 are not stored automatically in this procedure. To receive these stations, you must store them manually. See "Manual Storing of TV Stations" on page 37.

2 2 *AUTO SET UP*

WATCHING THE VIDEO PICTURE

The way you operate this VTR to watch a video picture depends on whether you use a SCART cable or not.

For SCART Cable Users

■ **To watch a video picture from the VTR**
Insert a cassette and press the **PLAY** button on the remote controller or front panel of the VTR. 19 H

■ **To watch or record a programme from the connected satellite receiver**
Press the **I. SELECT** button so that "SA" indicator appears in the VTR display. (See page 34.) 2

For Non-SCART Cable Users (Setting the Video Channel)

The VTR signals are sent to your TV from the AERIAL OUTPUT socket. Your TV must have a channel set aside exclusively for these VTR signals. This is called the video channel.

Preparation
Press the VTR button to set the remote controller operating the VTR. 28

1 Turn on the TV.

2 Select a free channel on the TV which you wish to use for your video picture, for example channel 9.
This channel 9 will be only used for watching a video picture.

3 Press the **ON/STANDBY** button to turn on the VTR. 12 A

ON/STANDBY

4 Hold down the **MENU** button **for more than 5 seconds**. 5

MENU

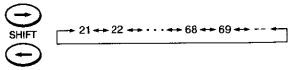
VTR display

This is a case where the Auto Set Up has selected channel 21 as the RF out channel that transmits the VTR signal to the TV.

5 Press the **MENU** button. 5
Video channel setting is complete.

Note on the RF Out Channel

- If you want to change the RF out channel after tuning, press the **SHIFT** buttons in step *4* to select the desired channel number. 14
The number changes in the VTR display as follows.



After selecting the number, re-tune the TV and confirm the screen is shown clearly.

You can change the RF out channel also while the MANUAL SET UP screen is displayed (ex. in step *4* on page 12).
Press **number button 3** to select "RF OUT CHANNEL", and change the number following the above procedure. 1

- If the VTR display shows " – – " in step *4*, there is no RF out channel selected by Auto Set Up. Connect the VTR to your TV using the SCART cable.

AUTO SET UP

2-3 CHECKING AUTO SET UP / CHANNEL SWAPPING

This section explains how to check if the TV stations are stored on the VTR correctly. If they are not stored correctly, you must enter them manually. (See page 37.)

Checking Auto Set Up

Using the **CH/TRK** buttons on the VTR's remote controller, check that the order of the TV stations stored on the VTR is as below. (This is important for the correct functioning of VIDEO Plus+ Deluxe.) 13

Position number	TV station
1	BBC1
2	BBC2
3	ITV
4	CHANNEL 4
5	CHANNEL 5
6	Satellite receiver

Position number 6 is reserved for a satellite receiver connected with an aerial cable. This position will be empty if there is no satellite receiver connected.

Any other stations are stored from position number 7 onward. If one of these has a better picture or is your preferred regional station, (e.g. Carlton instead of Meridian) then you can swap this into another position number. See the procedure below.

Channel Swapping

This VTR can move a TV station stored by Auto Set Up to another position number. This is called "Channel Swapping".

Example **To move a TV station stored on position number 7 to position number 3.**

1 Select position number 7 with the **CH/TRK** buttons. 13

CH/TRK

VTR display

2 Press the **MENU** button. The MAIN MENU screen appears. 5

MENU

```
MAIN MENU
TIMER PROGRAMMING
USER SETTING
INSTALLATION
CLOCK SET
ewSTV i ewL inSETTING

Press ▲▼ to select
Press MENU to exit
```

3 Press **number button 3** to select "INSTALLATION". 1

3

```
INSTALLATION MENU
AUTO SET UP
MANUAL SET UP
SATELLITE SETTING
SAT. CONNECTION ( SAT )
SAT. BRAND NO. ( 17)
VIDEO PLUS+ GUIDE CH
Press ▲▼ to select
Press MENU to exit
```

4 Press **number button 2** to select "MANUAL SET UP". 1

2

```
MANUAL SET UP
CH SWAPPING
MANUAL TUNING
RF OUT CHANNEL ( 21)

Press ▲▼ to select
Press MENU to exit
```

5 Press **number button 1**. The following text will be superimposed over the position number you selected. 1

1

```
CH SWAPPING
CH P.  NEW CH P.
 7   →   --

CH P.∨/∧ to find station
Select NEW CH P. press▲▼
Press SHIFT to swap
Press MENU to exit
```

6 Press **number button 0** and **3** to select a new position number, then press the **SHIFT**(→) button. 1 14

0 → 3 → (→) • SHIFT

```
CH SWAPPING
CH P.  NEW CH P.
 7   →   3

CH P.∨/∧ to find station
Select NEW CH P. press▲▼
Press SHIFT to swap
Press MENU to exit
```

7 To select another stored station to move, press the **CH/TRK** buttons and follow step *6*. 13

8 Press the **MENU** button. Now Channel Swapping is complete. Further press the **MENU** button three times to return to the normal TV screen. 5

BASIC OPERATION

3-1 ON SCREEN DISPLAY / VIDEO CASSETTE USE

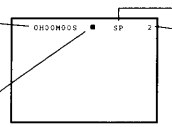
This is basic information for the playback operation.

Displays and Indicators on the Screen

Pressing the **DISPLAY** button makes the operating mode appear. If you press this button again, the indication goes off, leaving the counter indication on the screen. To turn it off, press the **DISPLAY** button once more. 23

Counter indication
- Linear time counter
- Tape time remaining
- Clock

Each time the **COUNT/TR** button 17 is pressed, the indication changes. (For details, see page 20.)



Tape speed (SP/LP/SLP)

Position number

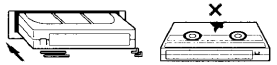
The indicator varies with the operating mode.

Ejecting a tape	⏏
Stop	■
Fast-forwarding Forward picture search	▶▶
Rewinding Reverse picture search	◀◀
Recording	●
Recording pause	❚❚●
Playback	▶
Still picture Frame advance	❚❚
Slow playback	❚▶

Note
In addition to the indication above, the VTR may display other indicators such as index search. See respective pages for each explanation.

Video Cassette Use

■ **Loading a Cassette**
Push the cassette into the cassette compartment with the window side facing up and the label side towards the front. The VTR is automatically turned on. The ⊂⊃ indicator will appear in the VTR display. B



■ **Ejecting a Cassette**
Press the **EJECT** button. The cassette is ejected from the cassette compartment. C

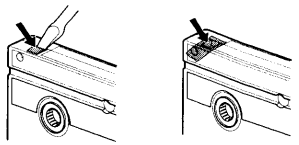
Warning
Do not insert your hands or any foreign objects into the compartment. This may result in injury or damage. Take special care with children to avoid accidents.

Precautions When Using Video Cassettes

Video cassettes have a safety tab to prevent accidental erasure. If the tab has been removed, recording cannot be performed.

■ **To prevent accidental erasure**
Remove this safety tab with a screwdriver.

■ **To record again**
Cover the tab hole with adhesive tape.



- Avoid exposing cassettes to direct sunlight. Keep them away from heaters.
  Avoid extreme humidity, vibrations or shock, strong magnetic fields (near a motor, transformer or magnet) and dusty places.

3 1 *BASIC OPERATION*

ON SCREEN DISPLAY / VIDEO CASSETTE USE

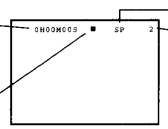
This is basic information for the playback operation.

Displays and Indicators on the Screen

Pressing the **DISPLAY** button makes the operating mode appear. If you press this button again, the indication goes off, leaving the counter indication on the screen. To turn it off, press the **DISPLAY** button once more. 23

Counter indication
- Linear time counter
- Tape time remaining
- Clock

Each time the **COUNT/TR** button is pressed, the indication changes. 17
(For details, see page 20.)



Tape speed (SP/LP/SLP)

Position number

The indicator varies with the operating mode.

Ejecting a tape	⏏
Stop	■
Fast-forwarding Forward picture search	▶▶
Rewinding Reverse picture search	◀◀
Recording	●
Recording pause	II●
Playback	▶
Still picture Frame advance	II
Slow playback	I▶

Note
In addition to the indication above, the VTR may display other indicators such as index search. See respective pages for each explanation.

Video Cassette Use

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Push the cassette into the cassette compartment with the window side facing up and the label side towards the front. The VTR is automatically turned on. The ⊂⊃ indicator will appear in the VTR display.

■ **Ejecting a Cassette** C
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Warning
Do not insert your hands or any foreign objects into the compartment. This may result in injury or damage. Take special care with children to avoid accidents.

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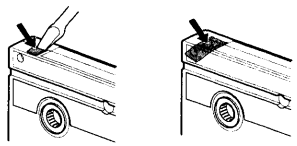


- Avoid exposing cassettes to direct sunlight. Keep them away from heaters.
  Avoid extreme humidity, vibrations or shock, strong magnetic fields (near a motor, transformer or magnet) and dusty places.

3 3 *BASIC OPERATION*

RECORDING

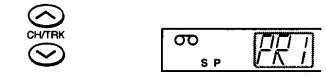
This section explains the basic recording operation. To record satellite programmes, see "SATELLITE" on pages 32 to 35.

Recording a TV Programme

Preparation
- Turn on the VTR.
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operating the VTR (V-729B only). 28

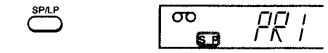
1 Load a cassette with the safety tab attached. B

2 Select the TV programme (position number) to record with the **CHANNEL** buttons on the VTR, or the **CH/TRK** buttons or **number buttons** on the remote controller. G 13 1



If "L" or "SA" is displayed in the VTR display, press the **I.SELECT** button so that the position number appears. 2

3 Press the **SP/LP** button to select the recording tape speed. 9



SP: Suitable for general recording with better picture and sound quality.
LP: Suitable for doubling recording time, but with less picture and sound quality than using the SP tape speed.

4 Press the **REC** button on the VTR, or simultaneously press the two **REC** buttons on the remote controller. D 6
Recording starts.

5 Press the **STOP** button to stop recording. 21 K

Watching a TV Programme While Recording

While recording, choose another channel using the channel selector on the TV.

Recording Uninterrupted Scenes While Recording

Press the **PAUSE/STILL** button to stop recording momentarily. To resume recording, press the **PAUSE/STILL** button again. 22

Note
The VTR automatically shifts to the stop mode if the recording pause mode continues for 10 minutes.

BASIC OPERATION

3 4 VIDEO Plus+ Deluxe PROGRAMMING SYSTEM RECORDING

You can easily programme a recording simply by entering the PlusCode programming number. The numbers are published in the TV listings of newspapers, TV guide magazine, etc.

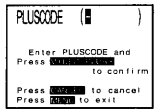
VIDEO Plus+ Deluxe Programming System Recording

Preparation

- Turn on the VTR.
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operating the VTR. 28
- Make sure that the clock is set correctly.
- Make sure that the TV stations have been stored properly (page 12).

1 Press the **VIDEO PLUS+** button. 24
The VTR enters the VIDEO Plus+ Deluxe programming system mode.

VIDEO PLUS+

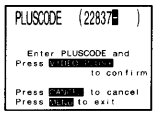


2 Enter the PlusCode programming number.

Example: To record a TV programme beginning at 18:00 on August 30, 1999 with PlusCode programming number 22837 (fiction).

Press **number button 2, 2, 8, 3** and **7.** 1
Confirm that the entered number is correct.

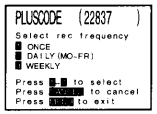
(2)-(2)-(8)-(3)-(7)



- To correct the number, clear all digits by pressing the **CANCEL** button and re-enter a number. 16

3 Press the **VIDEO PLUS+** button. 24
The TV screen changes as follows:

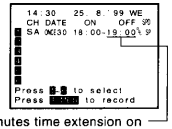
VIDEO PLUS+



ONCE: One-time recording.
DAILY (MO-FR): Records TV programmes on the same TV channel at the same time Monday through Friday.
WEEKLY: Records TV programmes on the same TV channel at the same time on the same day every week.

4 To select "ONCE" for example, press **number button 1**. The "ONCE" programming has been made automatically. 1
Programme details are shown.

(1)



Ex. If you set 10 minutes time extension on the USER SETTING screen (see below), "OFF" displays 19:10.

5 To set PDC, move forward to "PDC" by the **SHIFT**(→) button, and press **number button 1**: if not set, press **number button 2**. 14 1

Note
If you have set the VTR to the satellite receiver control mode (SAT displayed), PDC cannot be set.

6 To change the tape speed, press the **SP/LP** button. 9

7 Press the **VIDEO PLUS+** button. 24
The programme setting is now memorized.

8 To enter another PlusCode programming number, repeat steps *2* to *7*.

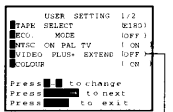
9 Finally press the two **TIMER** buttons simultaneously. The VTR enters the timer standby mode and the ◴ indicator lights up. 18

Setting Time Extension

Before making a VIDEO Plus+ Deluxe programming system recording, set possible time extension for the recording to allow for programme's overrun. You can extend the recording time in 10 minute increments up to 60 minutes.

1) Press the **MENU** button to display the MAIN MENU screen. 5
2) Press **number button 2** to select "USER SETTING". 1
3) Press **number button 4** repeatedly to set desired time extension. 1

(4)



OFF ← 60 ← 50 ← 40 ← 30 ← 20 ← 10

4) Press the **MENU** button twice to exit. 5

Notes

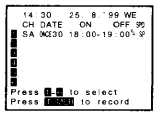
- Extend time should be set before starting VIDEO Plus+ Deluxe programming system recording procedure.
  The time extending doesn't work on recording programmes already memorized.
- When you do not use time extension for VIDEO Plus+ Deluxe programming system recording, set to "OFF" on the USER SETTING screen.

Confirming the VIDEO Plus+ Deluxe Programming System Timer Programme

■ **Before the VTR enters the timer standby mode (◴ indicator not lit)**

1) Press the **MENU** button to display the MAIN MENU screen. 5
2) Press **number button 1** to select "TIMER PROGRAMMING". 1

(1)



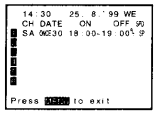
Check the programmed data.

3) Press the **MENU** button twice to exit. 5

■ **During the timer programme recording (◴ indicator lit)**

Press the **MENU** button. 5
The screen for confirming appears.

MENU



After about 30 seconds, the screen disappears.

Cancelling the Video Plus+ Deluxe Programming System Timer Programme

1) If the ◴ indicator is lit, press the two **TIMER** buttons to turn it off, and turn on the VTR by pressing the **ON/STANDBY**. 18 12
2) Press the **MENU** button to display the MAIN MENU screen. 5
3) Press **number button 1** to select "TIMER PROGRAMMING". 1
4) Select a program number which you want to cancel by using **number buttons**. 1
5) Press the **CANCEL** button. 16
The line is cleared out.
6) Press the **MENU** button. 5

Recording or Playback in the Timer Standby Mode

First press the two **TIMER** buttons to release the timer standby mode, and then press the **ON/STANDBY** button to turn on the VTR. The VTR will be available for use. 18 12

- Be sure to press the two **TIMER** buttons again to return the VTR to the timer standby mode after you operate. 18

If a Power Failure Occurs During the Timer Programme Recording

- If the ◴ indicator is missing in the VTR display after the power failure, the programmed contents have been cleared. Reset the timer programming.
- When power has failed for a short time, the colon of the current time display blinks. The programmed contents are not affected. Reset the clock.

Error Indicators

When the "Full (Clear prog?)" message appears on the TV during programming, no more programmes can be entered. If you want to add another programme, select one existing programme on the screen by using number buttons, and press the CANCEL button to delete it.

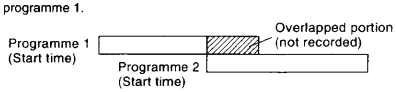
If impossible PlusCode programming number is entered, "Invalid code entered" blinks on the screen to tell you that the recording cannot be performed. Press the CANCEL button to clear the PlusCode programming number and enter correct one.

If "Clash" message appears on the screen during programming, it tells you that two programmes with the same recording start time have been entered. You have to make a correction. On this screen, item number means that the item has been entered later.

1) Enter the number of the programme you want to correct using **number buttons**.
2) Correct the timer programme data, or clear the data by pressing the **CANCEL** button and then press the **VIDEO PLUS+** button to enter the PlusCode programming number.

Overlaps of the programmes

If two programmes overlap, the recording start time of programme 2 has a priority over the recording end time of programme 1.



BASIC OPERATION

35 TIMER PROGRAMME RECORDING

The programmable timer allows you to record up to 6 different programmes over one month.

Timer Programming Procedure

Preparation
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote controller operating the VTR. 28
- Turn on the VTR.
- Make sure that the clock is set correctly.

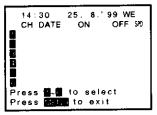
Example **To record a programme of a station stored on position number 1 (e.g. BBC1) in the SP tape speed from 21:30 until 22:00 on August 30. Today is August 25.**

1 Load a cassette with the safety tab attached. B

2 Press the **MENU** button. 5
The MAIN MENU screen appears.

3 Press **number button 1** to select "TIMER PROGRAMMING". 1

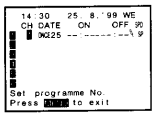
(1)



Programme number 1 is ready to accept your input.

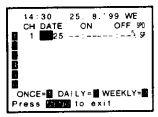
4 Select an empty programme number using **number buttons 1** to **6**. 1

(1)



5 To select position number 1, press **number button 0** and **1**. 1

(0)→(1)

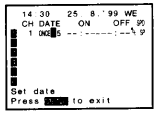


- If you record from the connected external equipment, make "L" or "SA" appear by pressing the **I.SELECT** button as follows: 2
  - L : Via the IN/OUT (SCART) socket on the rear panel
  - SA: From the satellite receiver connected to the SATELLITE (SCART) socket on the rear panel.

To make corrections:
Press the SHIFT (←) button to move back to the item, or the SHIFT (→) button to move forward. 14

6 Select a frequency of recording. (eg. once) 1

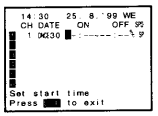
(1)



You can also set daily or weekly timer programme recordings. (See next page.)

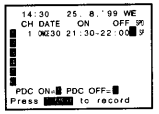
7 Set the recording date. 1

(3)→(0)



8 Set the recording start time and the off time. 1

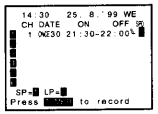
(2)→(1)→(3)→(0)
(2)→(2)→(0)→(0)



9 To set PDC, press **number button 1** : if not set, press **number button 2**. 1

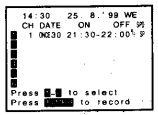
Note
If you have set the VTR to the satellite receiver control mode (SA displayed) in step *5*, PDC cannot be set.

(1)



10 Select the tape speed (SP). 1

(1)

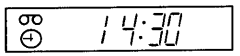


To set another programme, follow steps *4* to *10*.
In step *4*, select next programme number.

11 Press the **MENU** button. 5
Now programming is complete.

12 Press the two **TIMER** buttons simultaneously. 18

The power turns off and the VTR enters the timer standby mode.



Daily and Weekly Recording

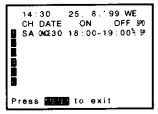
■ **Daily recording** 1
You can record TV programmes on the same channel at the same time Monday through Friday.
Press **number button 2** for "DAILY" in step *6*.

■ **Weekly recording** 1
You can record TV programmes on the same channel on the same day and time every week.
Press **number button 3** for "WEEKLY", then **number button 1** to **7** to select a day of the week in step *6*.

Confirming the Timer Programmes (During the Timer Programme Recording)

Press the **MENU** button. 5
The screen for confirming will appear.

MENU



After about 30 seconds, the screen disappears.

Changing/Cancelling the Timer Programmes

1) If the ⏲ indicator is lit, press the two **TIMER** buttons to turn it off, and then turn the VTR on by pressing the **ON/STANDBY** button. 18 12

2) With steps *2* to *11*, change the items.
- To cancel a programme, select the programme number you want to cancel in step *4*, and press the **CANCEL** button. The line is then cleared. 16

3) Press the two **TIMER** buttons to return to the timer standby mode. 18

Recording or Playback in the Timer Standby Mode

First press the two **TIMER** buttons to release the timer standby mode, and then press the **ON/STANDBY** button to turn on the VTR. The VTR will be available for use. 18 12
- Be sure to press the two **TIMER** buttons again to return the VTR to the timer standby mode after you have finished. 18

Error Indication

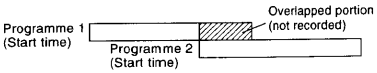
- The "E" (Error) indicator appears in the VTR display if you press the TIMER buttons when:
  —a cassette is not loaded.
  —the loaded cassette has no safety tab.
  —no timer programme is set.
  In these cases, a recording can not be made.

If a Power Failure Occurs During the Timer Programme Recording

- If the ⏲ indicator is missing in the VTR display after the power failure, the programmed contents have been cleared. Reset the timer programming.
- When power has failed for a short time, the colon of the current time display blinks. The programmed contents are not affected. Reset the clock.

Overlaps of the programmes

If two timer programmes overlap, the recording start time of programme 2 has priority over the recording off time of programme 1.



BASIC OPERATION

3 6 OPTIONAL SETTINGS / COUNTER FUNCTION

These functions will help your playback.

Optional Settings

You can easily make necessary settings using the on-screen display.

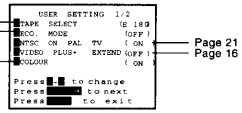
Preparation
- Turn on the VTR.
- Press the VTR button to set the remote controller operating the VTR. 28
- Select the video channel or video input mode on the TV.

1 Press the **MENU** button. 5
The MAIN MENU screen appears.

MENU

Page 18
See below.
Page 30

2 Press **number button 2** to select "USER SETTING". 1
For details on each item, refer to pages respectively as below.



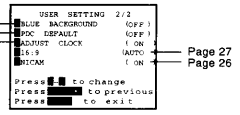
Page 21
Page 16

Press **number button 1** to select the used tape type. 1
The tape type changes as follows
→ E180 → E240 → E260 → E300

Press **number button 2** to turn on or turn off the VTR display during power standby. With "ON" set, VTR display will be cut-off to reduce energy consumption. 1

Press **number button 5** to select "OFF", if the TV programme or the tape is monochrome. 1

Press **SHIFT(→) button** to go to page 2/2 of USER SETTING.



Page 27
Page 26

With "ON" set, the TV screen automatically turns blue when:
—a selected channel is not broadcasting.
—no picture is recorded on the tape.
—no video signal is sent from the selected input source.
Pressing **number button 1** switches "ON" and "OFF".

With "ON" set, the PDC default setting for all timer programming will be set to on. 1
Pressing **number button 2** switches "ON" and "OFF".

With "ON" set, the VTR time is automatically updated. 1
Pressing **number 3** switches "ON" and "OFF".

3 Press the **MENU** button twice to return to exit. 5

Counter Function

You can view the clock, linear time counter or tape remaining time in the VTR display or on the TV screen.

Preparation
Press the VTR button to set the remote control operating the VTR. 28

Counter Displays

Each time you press the **COUNT/TR** button, the VTR display changes in sequence as follows: 17

COUNT/TR

Linear time counter (HMS)
↓
TR
↓
Input mode
↓
CLOCK

The indication above will also appear on the TV screen by pressing the **DISPLAY** button. They are switchable with the **COUNT/TR** button. 23 17

To reset the linear time counter to "0H00M00S"
The counter is automatically reset to "0H00M00S" when a cassette is ejected. If you want to reset at another point, such as the beginning of a new recording, just press the **COUNT/TR** and **CANCEL** button simultaneously. 17

Notes
- The linear time counter does not work on non-recorded portions on the tape.
- When the tape is ejected or the VTR is turned off, the display changes to clock.
- If the tape rewinds back over "0H00M00S", "—" appears in the VTR display.
- The displayed time of the linear time counter is only an approximation.

ADVANCED OPERATION

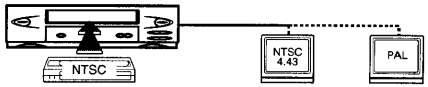
4 1 NTSC-RECORDED TAPE PLAYBACK

This VTR can play back an NTSC-recorded tape. You can watch the playback picture on a PAL system TV or an NTSC 4.43 system TV.

Setting for NTSC Playback

When you play back an NTSC-recorded tape on this VTR, make a setting on the USER SETTING screen according to your TV.

NTSC tape: tapes on which NTSC M system broadcasts mainly broadcast in the U.S. and Japan are recorded, and tapes recorded in the NTSC video system which are commercially available on the market.



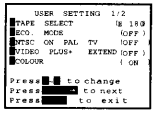
Multi System TV (NTSC 4.43 compatible)

1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 2** to select "USER SETTING". 1

3 Set "NTSC ON PAL TV" to "**OFF**" by pressing **number button 3**. 1

3



4 Press the **MENU** button twice to exit. 5

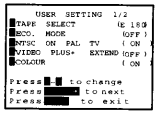
PAL System TV

1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 2** to select "USER SETTING". 1

3 Set "NTSC ON PAL TV" to "**ON**" by pressing **number button 3**. 1

3



4 Press the **MENU** button twice to exit. 5

Note
With this VTR, an NTSC tape recorded in the SLP tape speed can be played back. But there are some points to be observed.
- The quality of the playback picture and sound are not clear.
- Variable speed playback (picture search, still, slow playback, etc.) can't be performed properly.
- Digital auto tracking may not be performed properly.

Notes for Using a PAL TV for NTSC Playback

- Use a TV compatible with PAL video signals of PAL 60 (525 lines).
  When the TV, that is not compatible with PAL video signals of PAL 60, is used (when the TV, that is compatible only with PAL video signals of PAL 50 (625 lines), is used) NTSC playback pictures may roll up and down. This is not malfunction of the VTR or the TV.
  If your TV is equipped with a V-HOLD control, it may be possible to stop the rolling of pictures by adjusting this control.
  About PAL 50 and PAL 60 of PAL video signals:
  PAL 50 : is a normal signal and its PAL video signal is 50 fields (625 lines).
  PAL 60 : is a special signal and its PAL video signal is 60 fields (525 lines).
  Some TVs operate properly only with PAL 50 signals, some TVs operate properly with both PAL 50 and 60 signals.
  Therefore, if your TV is switchable between PAL 50 (625 lines)/PAL 60 (525 lines), you can view an NTSC recorded tape in the PAL colour system with your own TV.
- Depending on the TV used, the picture may shrink vertically and black bars may appear both at the top and bottom of the TV screen. This is not an indication of malfunction.
- Variable speed playback (picture search, still, slow playback, etc.) may produce a skewed image and quite a bit of noise on the picture.
- If the tape pre-recorded in the SP tape speed mode is played back in the picture search mode, the picture may be reproduced with no colour.

Note
For viewing an NTSC-recorded tape, we recommend using an NTSC 4.43 TV.

ADVANCED OPERATION

4 2 VARIABLE SPEED PLAYBACK

You can play back a tape at various tape speeds.

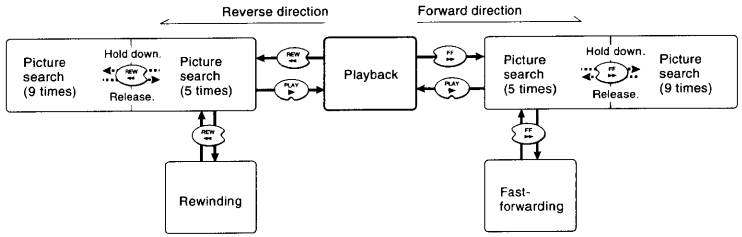
Variable Speed Playback

A variety of tape speeds are available on this VTR.

Picture search: Plays back at 5 times or 9 times the normal playback speed so that you can quickly locate a particular scene.
Still picture: Freezes the picture so that you can watch closer.
Slow-motion picture: Plays back at 1/6th or 1/12th the normal playback speed.
Frame advance: Advances the picture frame by frame

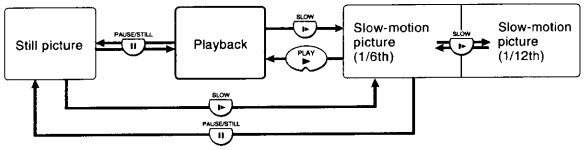
Picture Search

While playing back a tape, press the **FF** or **REW** button. 20 7
The tape runs at 5 times the normal playback speed.



Still Picture

While playing back a tape, press the **PAUSE/STILL** button. 22
The picture freezes.



Notes
- The still mode is automatically cancelled after about 5 minutes and returns to normal playback.
- The still picture may shake if a picture of a fast-moving object or scene is frozen. This is not a defect in the unit.

■ **Adjusting Still Picture Stability** 13
If the still picture is distorted or flickers, hold down one of the **CH/TRK** buttons until the picture becomes stable.

Note
The distortion of the still picture may not be eliminated completely.

Slow-motion Picture

While playing back a tape, press the **SLOW** button. 8
The tape runs at about 1/6th the normal playback speed.

Notes
- The slow-motion picture mode is automatically cancelled after about 5 minutes and returns to normal playback.
- The slow-motion picture may flicker up and down. This is not a defect in the unit.

■ **Adjusting the Tracking Manually** 13
If the slow-motion picture is noisy, hold down one of the **CH/TRK** buttons until the best picture is obtained.

Note
The noise in the slow-motion picture may not be eliminated completely.

Frame Advance

While the picture is frozen (see "Still Picture"), press the **PLAY** button repeatedly. 19 H
The picture advances one frame as you press the button.

If you press and hold the button, the tape runs at 1/25th the normal playback speed.

To resume normal playback, press the **PAUSE/STILL** button. 22

Notes
- If you playback a tape recorded in the LP or SLP tape speed or a tape recorded on another VTR in various speed mode, the picture maybe noisy or monochrome.
- When you use an NTSC-recorded tape, picture search and accelerated picture search, the slow-motion picture speeds are as follows.

		Accelerated picture search		
PAL(SP)	x5	x9	1/6	1/12
PAL (LP)	x5	x13	1/6	1/12
NTSC (SP)	x5	x7	1/7	1/15
NTSC (SLP)	x5	x15	1/7	1/15

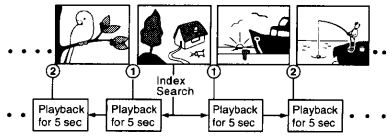
ADVANCED OPERATION

4-3 INDEX SEARCH

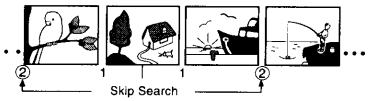
You can easily locate the desired programme using the index signal registered on the tape.

About This Function

Index Search
The VTR plays back each programme with an index signal for about 5 seconds.



Skip Search
The VTR finds and plays back a programme with an index signal you specified.



To use this function, index signals have to be registered on your tape. For registering index signals, follow the procedure below.

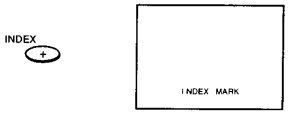
Registering Index Signals

■ **Registering index signals automatically**
An index signal is automatically registered **when a recording starts.**

Notes
- An index signal is not registered when the VTR is in the recording pause mode and recording restarts.
- An index signal is also registered when a timer programme recording starts.

■ **Registering index signals manually**
Index signals can be manually registered at desired points on the tape **during recording.**

Press the **INDEX** (+) button at a desired point. 4



Note
When registering two or more index signals, certain intervals are required: more than 1 minute in the SP tape speed and more than 2 minutes in the LP tape speed.

Index Search

This function plays back the tape for about 5 seconds at each index signal.

1 Load a cassette with the index signals registered. B

2 Press the **INDEX** (–) or (+) button in the stop or playback mode. 3 4

INDEX (–) : to search in the reverse direction

INDEX (+) : to search in the forward direction

The VTR fast-forwards or rewinds the tape. When an index signal is found, the VTR plays back the tape for about 5 seconds, and then resumes fast-forwarding or rewinding. This is repeated each time at an index signal.

3 Press the **PLAY** button when the desired programme is found. 19 H
Normal playback starts.

Notes
- At the very beginning of the tape, the index search function may not work properly.
- If you registered the index signals on a tape recorded on another VTR, the recording may be blurred at the index point and the index search may not work properly.

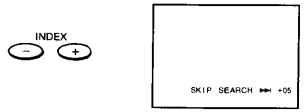
Skip Search

This function fast-forwards or rewinds the tape to the point at which the selected index signal is registered, and starts playback from there.

1 Load a cassette with the index signals registered. B

2 Press the **INDEX** (–) or (+) button twice in the stop or playback mode. 3 4

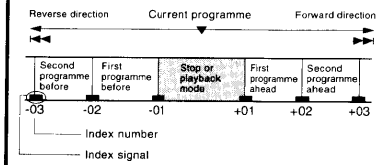
3 Press the **INDEX** (–) or (+) button depending on the direction where your desired programme is located. 3 4
Each time you press the (–) or (+) button, the number decreases or increases respectively.



The VTR starts to search for the point you specified with the (–) or (+) button. When the point is found, playback will start automatically.

Notes
- You can set an index number up to ±20.
- The skip search is cancelled when the PLAY or STOP button is pressed.

Locating the Index Number



[Example]
- To locate the beginning of first programme before, press the **INDEX** (–) button three times to set the index number -02.
- To locate the beginning of next programme ahead, press the **INDEX** (+) button twice to set the index number +01.

ADVANCED OPERATION

4 4 NICAM COMPATIBLITY / AUDIO SELECT

This VTR incorporates a special decoder that can receive NICAM broadcast programmes.

NICAM Broadcast Programme

NICAM programmes are divided into 3 types. NICAM Stereo, NICAM Mono and Bilingual (transmission in another language). NICAM programmes are always accompanied by a standard mono sound broadcast and you can select the desired sound on the screen (for recording) or with the A.SELECT button (for playback).

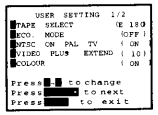
NICAM Broadcast Setting

1 Press the **MENU** button. 5

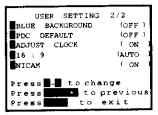
MENU

2 Press **number button 2**. 1

2



3 Press the SHIFT(→) button and **number button 5** to set "NICAM" TO "ON". 1



ON: Normally set at this position.
OFF: Only set at this position to record the standard mono sound during a NICAM broadcast if the stereo sound is destorted sue to inferior reception conditions.

4 Press the **MENU** button twice to exit. 5

Monitoring Sound Output

When monitoring a TV programme or playing back a Hi-Fi recorded video tape, press the **A.SELECT** button to select a desired sound output. As the **A.SELECT** button is pressed, the sound output and the indicator change as below: 26

VTR display \ Sound type	Stereo sound	Bilingual sound	Standard sound broadcast
L R	Heard in stereo. (left channel and right channel)	Channel I (MAIN) heard from the left speaker, Channel II(SUB)from the right speaker.	Heard in monaural.
L	Left channel heard from both the left and right speakers.	Channel I (MAIN) heard from both the left and right speakers.	Heard in monaural.
R	Right channel heard from both the left and right speakers.	Channel II (SUB) heard from both the left and right speakers.	Heard in monaural.
	Heard in monaural.	Channel I (MAIN) heard from both the left and right speakers.	Heard in monaural.
L R	Sound mixed the left and right channel, and the normal audio track. (See below).		

Sounds of a recorded TV programme
This VTR is capable of recording sound in Hi-Fi system. Stereo broadcasts and bilingual sound broadcasts are recorded in its original sound system regardless of the setting. (See the list above.)

Notes
- When listening to a stereo broadcast or playing back a Hi-Fi tape recorded in stereo, you have to connect the VTR with the stereo audio system or the stereo TV with a SCART cable.
  The sound which is output from the AERIAL OUTPUT socket is monaural.
- If a tape which is not Hi-Fi recorded is played back. L, R indicators go off automatically and the sound output is monaural.

Audio Select

This unit's Hi-Fi stereo audio track (2-channel)can be used to playback an excellent Hi-Fi sound. Sound that has been recorded on the normal audio track is compatible with conventional VTR'S

When playing back a Hi-Fi recorded tape, press the **A.SELECT** button to select desired sound output.
The L, R indicators in the VTR display tell you what kind of sound output you are selecting. Accordingly, you can select the desired sound output while observing the lit and/ or unlit indicators.
(See above "Monitoring Sound Output".)

Audio Mix Function

You can select different audio outputs, e.g. mixing one of the Hi-Fi stereo audio tracks and one of the normal audio track.

This function enables you, for example, to record your voice on a Hi-Fi recorded tape ("Audio Dubbing", page 28).

Press the **A.SELECT** button several times to make "MIX" appear in the VTR display.

A.SELECT

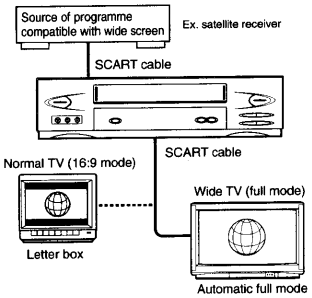
ADVANCED OPERATION

4 5 16:9 (WIDE SCREEN) COMPATIBILITY

This VTR is compatible with the 16:9 (Wide Screen) format.

16:9 (Wide Screen) Compatibility

The VTR automatically adjusts the image to fill the wide TV screen when you play back a tape commercially available which is recorded in the wide screen format, or when you record or play back a wide TV programme via the connected satellite receiver, etc.

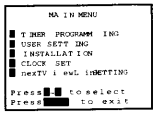


Important
Connect equipment compatible with wide screen, to the VTR using the SCART cable.

Setting of 16:9 Wide Screen

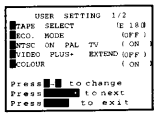
1 Press the **MENU** button. 5

MENU



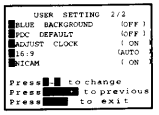
2 Press **number button 2**. 1

2



3 Press SHIFT(→) button and **number button 4** to set "16:9". 1

4



AUTO: Set when you use a wide TV.
The VTR detects wide TV programmes and normal TV programmes automatically when playing back and recording.
ON: The VTR always plays back and records in the mode compatible with 16:9 wide screen.
Set if the VTR cannot detect wide TV programmes with "AUTO" set.
OFF: Set if you do not use a wide TV.

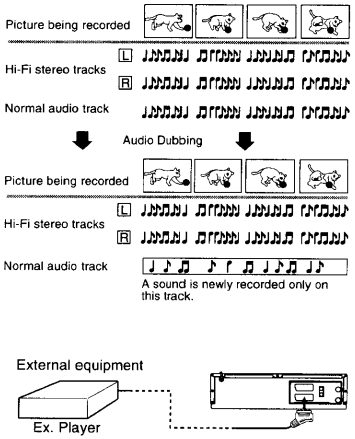
4 Press the **MENU** botton twice to return to the normal TV screen. 5

4.6 ADVANCED OPERATION
EDITING

Using another VTR or external equipment, you can copy a tape.

Audio Dubbing

You can record sounds by importing from an external equipment connected to the LINE IN jacks, onto the normal audio track of a pre-recorded tape, without erasing the pictures or sounds on the Hi-Fi stereo track.



Preparation
To import sounds from an external equipment, connect it to the LINE IN jacks.

1 Load a cassette you want to make audio dubbing on. (B)

2 Press the **PLAY** button to start playback. 19

3 Press the **PAUSE/STILL** button where you want to start audio dubbing. 22

4 Press the **A.DUB** button. 27

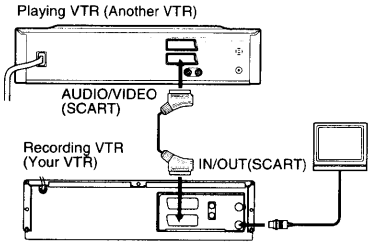
Some flickers may be produced on the screen. This is not a malfunction.

5 Press the **PAUSE/STILL** button to start audio dubbing. Play the sound from the external equipment. 22

Notes
To monitor the recorded sound, press the A.SELECT button to select the sound output. (See page 26.)

Tape Copying

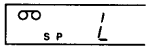
Using another VTR or external equipment, you can copy a tape.



Important
It is permissible to record television programmes only in the event that third party copyrights and other rights are not violated.

1 Press the **I.SELECT** button so that the VTR display shows "L" 2

When using the IN/OUT(SCART) socket



2 Press the **SP/LP** button to select the recording tape speed. 9

3 Play the tape on the playback VTR and press the **REC** buttons to start recording on this VTR. 6 (D)

4 Press the **STOP** button on each VTR when copying is finished. 21 (K)

Notes
- The picture quality of the copied tape is slightly less than the original picture quality.

4.7 ADVANCED OPERATION
MULTI BRAND REMOTE CONTROLLER (V-729B only)

The remote controller can be compatible with various brands of TV by setting their control codes. The TOSHIBA code has initially been set to control TOSHIBA TVs.

Setting Control Codes

1 While holding down the **TV** button, enter the two digits of your TV's brand code (listed right) using **number buttons.** 27 1

Hold down TV

example

2 Release the **TV** button. 27

3 Point the remote controller at your TV and use each button listed below to make sure that your TV is operated correctly.

ON/STANDBY	To turn the TV on or off.	12
CH	To select TV channels in the upper or lower direction.	13
VOL (Volume)	To adjust the sound level.	14
INPUT SELECT	To select an external source such as a VTR.	2
Number buttons/ ENTER button	To select TV channels. Way of use may differ with models of TV. Check how they work on your TV. Ex. To select channel 3: • 0→3 • 0→3→ENTER • ENTER→3 To select channel 16: • 1→6 • 1→6→ENTER • ENTER→ENTER→1→6	1 15

Important
Some TVs may not respond to all the operations above, or may not be operated at all with this remote controller. In this case, operate your TV with its own remote controller.

Notes
- For some brands, several control codes (brand codes) are allocated. Try each of them until the buttons work on your TV.
- If you replace the remote controller's batteries, set the brand code again.

Table of Brand Codes

Brand name of your TV	Brand code
TOSHIBA	01, 14, 15, 16, 17, 19
AKAI	08
BANG & OLUFSEN	20
BLAUPUNKT	04
BRANDT	11
BRIONVEGA	20
CGE	19
CONTINENTAL EDISON	22
FERGUSON	11, 24, 25
FINLUX	02, 15, 20
FISHER	08
FORMENTI	20
GOLDSTAR	02
GRUNDIG	04, 15, 19
HITACHI	06, 10, 11, 22
IMPERIAL	19
JVC	07
LOEWE	02
LOEWE OPTA	02, 20
METZ	20
MITSUBISHI	02, 09, 14
MIVAR	19
NOKIA	21
NORDMENDE	10, 11, 22
PANASONIC (NATIONAL)	03, 21, 26
PHILIPS	02, 18, 20
PHONOLA	02, 18, 20
PIONEER	11, 21
RADIOLA	02, 18
RADIOMARELLI	20
REX	21
SABA	10, 11, 20, 21, 22
SALORA	21
SAMSUNG	02
SANYO	08, 14, 27, 28, 29, 30
SCHNEIDER	02
SELECO	21
SHARP	05, 14, 27
SIEMENS	04
SINGER	20
SINUDYNE	20
SONY	13, 14
TELEAVIA	11
TELEFUNKEN	11, 24
THOMSON	10, 11, 22
WEGA	20
YOKO	02

ADVANCED OPERATION

48 nexTViewLink

If your TV has the "EasyLink / nexTViewLink" function, the VTR makes your VTR's setup and operations easier.

nexTViewLink FUNCTION of this VTR

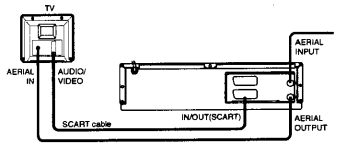
Using a SCART cable (21 pins), a mutual control is available with the TV, VTR, SAT receiver, etc.

- The VTR automatically stores all your current TV sations in the VTR in the same position order as the TV channels. ("TV CH P. DOWN LOAD")
- Even if the TV is in standby mode, the TV automatically turns on and displays the video picture when you start playback on the TVR.
- The VTR automatically selects the same picture as you are watching on the TV, and record it. ("TV PICTURE RECORD")
- The VTR takes in the data and turns to timer standby mode, after a programme data reserved is transferred to the VTR by a TV using such as a EPG (Electronic Programme Guide). In this case, the TV's and the VTR's channel position must be set to the same TV station. The position could be stored from 1 to 99. Also the VTR's clock must be set.

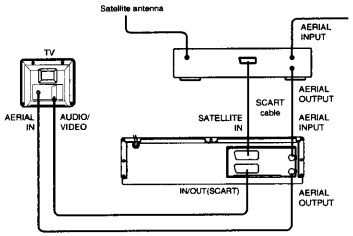
Connection

Connect your EasyLink / nexTViewLink TV to the AUDIO/VIDEO (SCART) socket on the VTR using the SCART cable. Refer to your TV's manual additionally.

■ **Connection to your EasyLink / nexTViewLink TV**

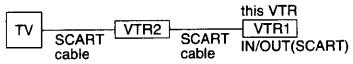


■ **Connection to your EasyLink/ nexTViewLink TV and a satellite receiver**



When connecting another VTR supporting EasyLink / nexTViewLink functions

The "nexTViewLink" system can connect 2 VTRs (VTR1 and VTR2) at the same time. This VTR is adjusted to "VTR1", so it should be connected to VTR2.



TV CH P. DOWN LOAD

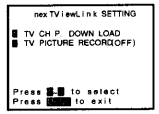
Preparation

- Turn on the TV.
- Select the video channel or the video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28

1 Press the **MENU** button to display the MAIN MENU screen. 5

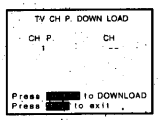
2 Press **number button 5** to select "nexTViewLink SETTING". 1

(5)



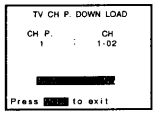
3 Press **number button 1** to select "TV CH P. DOWN LOAD". 1

(1)



4 Press the **SHIFT** (→)button to start downloading. 14

(→) SHIFT



5 When the downloading is finished, the "nexTViewLink SETTING" screen returns.

6 Press the **MENU** button twice to exit. 5

Notes

- The available position numbers on the VTR are 1 to 99.
- When the TV's channel position is readjusted, the VTR automatically makes "TV CH P. DOWN LOAD".

TV PICTURE RECORD

Preparation

- Turn on the TV.
- Select the video channel or the video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28

1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 5** to select "nexTViewLink SETTING". 1

(2)

3 Press **number button 2** to set "TV PICTURE RECORD" to "ON". 1

4 Press the **MENU** button twice to exit. 5

1 Load a cassette with the safety tab attached.

2 Press the **SP/LP** button to select the recording tape speed. 9

3 Press the **REC** button on the VTR, or simultaneously press the two **REC** buttons on the remote controller. 6

The VTR automatically selects the same picture as you are watching on the TV, and starts recording. Depending on the picture sources, the recording switches the method. See below.

4 Press the **STOP** button to stop recording. 21

Notes

- This recording is not available on the timer programme recordings.
- When you do not perform "TV PICTURE RECORD", set "TV PICTURE RECORD" to "OFF".
- If the TV has a key to operate the TV picture recording, the "TV PICTURE RECORD" could be started from the TV. In this case, the VTR's "TV PICTURE RECORD" must be set to "ON".

Picture and TV PICTURE RECORD

Picture	The VTR records:	During recording, if you change the channel or the input mode on the TV, the recording will be:
Channel selected on the TV If you performed "TV CH P. DOWN LOAD" (TV stations stored on the VTR and the TV in the same position order).	VTR channel of the same number as the TV channel	Ex. TV channel 1 SP PR1 Continued.
If you did not perform "TV CH P. DOWN LOAD" (TV stations not stored on the VTR and the TV in the same position order).	LINE (output of the TV)	SP L Stopped.
Pictures of external equipment connected to the TV. . . .	LINE (output of the TV)	SP L Stopped.
Channel selected on the VTR	VTR channel	Ex. VTR channel 1 SP PR1 Continued.

SATELLITE

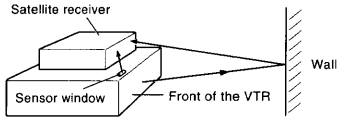
5-1 CONTROL OF SATELLITE CHANNELS

Your satellite channels can be selected or changed on this VTR via the connected satellite receiver, same as TV channels.

Setting to Control Satellite Channels

You can select satellite channels by operating this VTR.
It is also possible to automatically change the satellite channels according to your programme setting in the timer programme recording (page 18).

Important
Put the satellite receiver on the top of the VTR as shown below. Do not block the sensor window.



The infrared signals come out of the sensor window and the front of the VTR. Then they bounce off walls and other objects in the room and are received by the satellite receiver. The VTR sends out infrared signals to your satellite receiver even during timer programme recording.

Note
If the channels cannot be controlled properly because the infrared signal fails to reach the satellite receiver, change the position of the satellite receiver on the VTR so that it can receive the signal.

Preparation
- Keep the connected satellite receiver turned on.
- Make sure your satellite receiver is connected to the VTR correctly. (See page 10.)
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28

1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 3** to select "INSTALLATION". 1

(3)

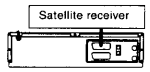
3 Press **number button 3** to select "SATELLITE SETTING". 1

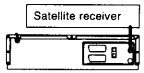
(3)

SATELLITE CONNECTION
How is your satellite connected
SATELLITE SCART (SAT)
RF AERIAL (CH P.)
AV SCART (LINE)
Press ▮-▮ to select
Press MENU to exit

4 Select 1 to 3 using **number buttons** as below depending on your satellite receiver conection. 1

- **SATELLITE (SCART)** socket
- **AERIAL INPUT** socket

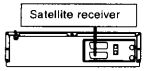




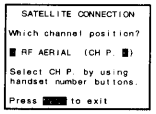
(1) Select "SATELLITE SCART".

(2) Select "RF AERIAL", and enter the position number you have chosen for satellite output (e.g.6, page 37) using **number buttons**.

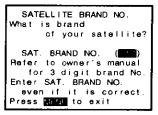
- **IN/OUT (SCART)** socket



(3) Select "AV SCART".


SATELLITE CONNECTION
Which channel position?
RF AERIAL (CH P.)
Select CH P. by using handset number buttons.
Press MENU to exit

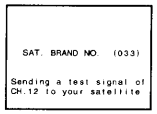
After you select 1 to 3, the screen changes as below.


SATELLITE BRAND NO.
What is brand of your satellite?
SAT. BRAND NO. ( )
Refer to owner's manual for 3 digit brand No.
Enter SAT. BRAND NO. even if it is correct.
Press MENU to exit

5 Enter three figures of the brand code for your satellite receiver by **number buttons**. 1
Check the brand code list (page 33).

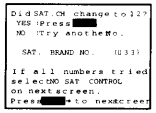
Ex. To enter brand code 33.

(0)→(3)→(3)



When you enter the brand code, the VTR sends a test signal to the satellite receiver to make sure that the brand code has been entered correctly. The signal will set the satellite channel to 12. If channel 12 is displayed on your satellite receiver, it means the brand code is set correctly.

Several codes may be allocated to one brand. Enter one after the other until the channel shows 12.


Did SAT.CH. change to 12?
YES :Press
NO :Try another No.
SAT. BRAND NO. (033)
If all numbers tried select NO SAT. CONTROL on next screen.
Press → to next screen

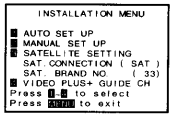
6 Press the **MENU** button. 5

7 Select 1 to 4 using **number buttons** as below depending on your satellite receiver. 1

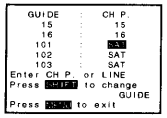
Select . . .
1: If the channel of SKY ONE is 1*.
2: If the channel of SKY ONE is 8*.
3: If the order is personal choice.
4: If your satellite receiver did not change to channel 12 in step *5*.

* Refer to the "GUIDE Channel Table" (page 38).

If 1, 2 or 4 is selected, the screen returns to the INSTALLATION MENU of your setting after a few seconds.



If you selected 3, the screen changes as below.
It is necessary to make the setting of the GUIDE channels on this screen.
Follow steps from *4* on page 35 to set "CH P." column for all your satellite channels.



8 Press the **MENU** button several times until you return to the normal TV screen. 5

Controlling Satellite Channels

■ Using the remote controller of this VTR

1) Press the **SAT.CONT.** button to make "SAT" appear in the VTR display. 25

2) Select a desired satellite channel using **number buttons**. 1 15
Way of use may differ. Check how they work on your satellite receiver.

Ex. To select channel 3:
- 0→3
- 0→3→ENTER
- ENTER→3

To select channel 16:
- 1→6
- 1→6→ENTER
- ENTER→ENTER→1→6

Important
Some satellite receivers may not respond to all the operations above, or may not be operated at all with this remote controller. In this case, operate your satellite receiver with its own remote controller.

Notes
- Each time the SAT.CONT. button is pressed, this function goes on or off.
- To make a position number appear in the VTR display after you have cancelled this function, press the I.SELECT button.

■ Changing satellite channels automatically in the timer programme recording

When timer recording programming, press the **SAT.CONT.** button to display "SA" on the screen, and then enter a desired satellite channel using **number buttons** (step *5*, page 18). 25 1
Go through steps **1)** and **2)** above beforehand and confirm that channels are properly selected.

Note
Keep the satellite receiver turned on even while the VTR is in the timer programme recording.

Table of Satellite Receiver Brand Codes

Brand name	Brand code
TOSHIBA	17, 33
ALBA	1, 2, 9, 16, 17, 65, 66
AMSTRAD	3, 4, 5, 17, 55, 56, 76, 77, 89, 90, 91, 124
ARMSTRONG	17, 43
BIG BROTHER	7, 8, 17
BT	17, 122, 123
BUSH	2, 9, 16, 17, 65, 66
CABLE STAR	17, 101, 102, 103, 104
CABLETIME	17, 101, 102, 103, 104
CAMBRIDGE	17, 122, 123
CHANNEL MASTER	2, 3, 10, 17
D2MAC DECODER	17, 72
DRAKE	17, 45
ECHOSTAR	13, 14, 17, 92, 93, 94
FERGUSON	9, 15, 16, 17, 23, 38, 39, 59, 108
GRUNDIG	17, 19, 28, 71, 125
ITT/NOKIA	17, 26, 27, 50, 51, 52
JVC	17, 122, 123
LENCO	17, 49
MASPRO	17, 20, 64, 67
MATSUI	17, 125
NEC	17, 22, 57
NETWORK	9, 16, 17

Brand name	Brand code
NORDMENDE	17
PACE	9, 16, 17, 23, 38
PANASONIC	17, 61
PHILIPS	16, 17, 24, 46, 73
REDIFFUSION	17, 25
REVOX	17, 21
SAKURA	17, 62, 63, 68
SALORA	17, 26, 27, 50, 51, 52
SAMSUNG	17, 36
SIEMENS	17, 23
SENTRA	10, 17
SONY	17, 30
TATUNG/NIKKO	17, 32, 54, 58, 80, 81
TEXSCAN	17, 119, 120
THOMSON	7, 17, 39
TRISTAR	17, 31
UNIDEN	17, 67
VIDEOTRON	17, 105, 106, 107, 108, 109, 110, 121
WISI	17, 35, 37, 44, 93

- For some brands, several brand codes are allocated.
- Some satellite receivers may not be operated at all with this VTR.

5 2 SATELLITE
RECORDING FROM A SATELLITE RECEIVER

If you are using a satellite receiver, you can connect it to this VTR to record a satellite programme.

Recording Procedure

Preparation
- Turn on the VTR.
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28
- Make sure your satellite receiver is connected to the VTR correctly using a SCART cable (page 10), and turn it on.

1 Load a cassette with the safety tab attached. B

2 Press the **I.SELECT** button so that "SA" indicator appears in the VTR display. 2

Each time you press the **I.SELECT** button, the display changes as follows. 2

→ PR (position number)→ L → SA (satellite)

3 Select the desired satellite channel on the connected satellite receiver.
Make sure that the selected channel is on the TV.

4 Press the **SP/LP** button to select the recording tape speed. 9

5 Press the **REC** button on the VTR, or simultaneously press the two **REC** buttons on the remote controller. D 6
Recording starts.

6 Press the **STOP** button to stop recording. 21 K

Watching a TV programme while recording a satellite programme

Choose a desired TV channel on the TV.

5 3 SATELLITE
VIDEO Plus+ Deluxe PROGRAMMING SYSTEM RECORDING OF SATELLITE PROGRAMMES

You have to set the GUIDE channel to record a satellite programme by VIDEO Plus+ Deluxe programming system.

GUIDE Channel Setting for Satellite Channels (Using a Satellite Receiver)

The VTR generally does this setting during "Setting to Control Satellite Channels" procedure (page 32). Use this procedure to correct the GUIDE channels or to make the GUIDE channel setting if your satellite receiver has a channel order other than SKY or ASTRA.

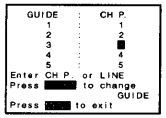
Preparation
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28

Example **To set a GUIDE channel 101 of SKY ONE.**

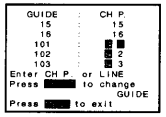
1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 3** to select "INSTALLATION". 1

3 Press **number button 4** to select "VIDEO PLUS+ GUIDE CH". 1



4 Scroll the numbers to put 101 in the center position of the "GUIDE" column using the **SHIFT** button. 14



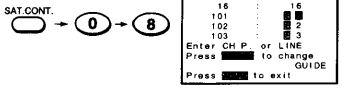
Refer to the chart you prepared (page 36).

STATION NAME	VIDEO Plus+ SYSTEM GUIDE CHANNEL	SKY ORDER	ASTRA ORDER	PERSONAL PREFERENCE
SKY ONE	101	1	8	
SKY NEWS	102	2	12	
SKY MOVIE MAX	103	3	16	
SKY PREMIERE	104	4	18	
THE DISNEY CHANNEL	111	5	26	
SKY BOX OFFICE 1	111	5	26	
SKY SPORT 1	105	6	20	
NICKELODEON				
			46	
	149	29	37	
EUROSPORT	107	30	4	
CNN	126	31	28	

* 1 Note: It is important that you check that your VIDEO Plus+ programming system Guide channel order stored on your VTR is the same order as your Satellite Receiver otherwise VIDEO Plus+ programming system will not work correctly.

5 Press the **SAT.CONT.** button ("SAT" displayed), and enter a channel number on the satellite receiver using **number buttons**. 25 1

If SKY ONE is channel 8 on your satellite receiver channel selector . . .



6 To set GUIDE channels for other satellite channels, repeat steps *4* and *5*.

7 Press the **MENU** button three times to exit. 5

Now you can make VIDEO Plus+ Deluxe programming system recordings of satellite channels. (See page 16.)

MANUAL SET UP

6 MANUAL SET UP

The manual procedure of Auto Set Up will help an additional TV station storing or clock resetting, etc.
This VTR can store up to 99 positions for TV stations.

Reset-Up Automatically

Use this procedure if the Auto Set Up needs to be made again, for example, after a power failure, when plugged off, or in the event of receiving stations change.

Preparation

- Turn on the TV, and select the video input mode or video channel if you made the aerial connection (page 10).
- Press the VTR button to set the remote control operation your VTR. 28
- If your satellite receiver is connected using an RF lead, select SKY ONE on the satellite receiver. Auto Set Up will allocate position number 6 on the VTR for the satellite output.

1 Press the **ON/STANDBY** button to turn on the VTR. 12 A

2 Press the **MENU** button to display the MAIN MENU screen. 5

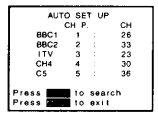
MENU

3 Press **number button 3** to select "INSTALLATION". 1

3

4 Press **number button 1** to select "AUTO SET UP". 1
The VTR starts automatic TV station storing and clock setting if you press the **SHIFT** (→) button. 14

SHIFT



Note
If "– –" is shown, perform "Manual Storing of TV Stations" (page 37) for the TV station.

5 Press the **MENU** button four times to return to the normal TV screen. 5

Notes

- If the time of the clock is not correct after this procedure, perform "Clock Setting" on this page.
- The TV stations in tuning range numbers 2 and 3 are not stored automatically in this procedure. To receive these stations, you must store them manually. See "Manual Storing of TV Stations" on page 37.

Clock Setting

If BBC1 is stored in position number 1, the VTR automatically sets the clock, and will adjust it to the BBC1 signal at 8:00 every morning.
If BBC1 is not stored in position number 1, follow the procedure below to set the clock.

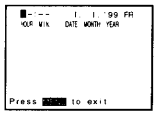
The item to be set blinks. You can change the position by pressing the SHIFT buttons. 14

Example **To set the clock to 14:30 on August 25, 1999**

1 Press the **MENU** button to display the MAIN MENU screen. 5

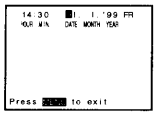
2 Press **number button 4** to select "CLOCK SET". 1

4



3 Set the hours and minutes. (24 hours clock format) 1

1 → 4 → 3 → 0

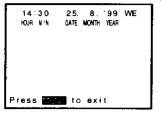


4 Set the day and month. 1

2 → 5 → 0 → 8

5 Set the year with its last two digits. 1

9 → 9



6 Press the **MENU** button. 5
Now the clock starts.

MENU

7 Press the **MENU** button again to exit. 5

Manual Storing of TV Stations

Information
Each TV station operating in the U.K. (e.g. BBC1, ITV) broadcasts on a unique frequency, which in turn has been allocated a transmission channel number (21 – 69). However, this unique frequency and corresponding number changes for each TV station from area to area. For example, BBC1 in London uses channel number 26, while in Oxford BBC1 uses channel number 57 (i.e., CH57).
This VTR will indicate these channel numbers (1 – 9, 21 – 69) during tuning.

Tuning range number	Band	TV channel number
–	VHF	A – J (1 – 10), 11, 13 E2 – E12 (82 – 92)
	UHF	E21 – E69 (21 – 69)
	CATV	X, Y, Z (71, 72, 73)
2	CATV	1 – 53 (48MHz to 464MHz, 8MHz steps)
3	CATV	S1 – S41 (1 – 41)

Preparation

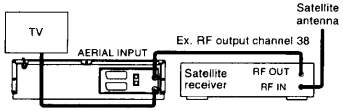
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28
- Turn on the VTR.
- If you use a satellite receiver, make the connection correctly (page 10) and turn it on.

Example **To store BBC1 to position number 1 on your VTR.**

Allocation of the TV stations into the memory of the VTR is expected to be as follows, for VIDEO Plus+ Deluxe programming system recording.

BBC1: Position number 1
BBC2: Position number 2
ITV: Position number 3
CHANNEL 4: Position number 4
CHANNEL 5: Position number 5

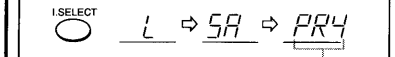
Satellite: Position number 6, example (if connected by an RF lead only as shown below.)



In this case, select position number 6 in step *5*, and channel 38 in step *6* if the output channel of your satellite receiver is 38, for example. Make sure that TV receives a satellite broadcast.
Whenever you watch or record a satellite programme, select position number 6.

Important
This procedure can be performed only when the VTR display shows a position number on the VTR. If the "L" or "SA" is displayed, press the I.SELECT button so that the position number appears. 2

I.SELECT



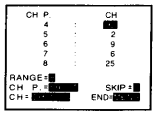
1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 3** to select "INSTALLATION". 1

3 Press **number button 2** to select "MANUAL SET UP". 1

4 Press **number button 2** to select "MANUAL TUNING". 1
The VTR is now in the tuning mode, and the screen display appears.

2



5 Press the **SHIFT** button to select position number 1. 14

SHIFT

■ **To change the tuning range number** 1
Press **number button 6** repeatedly to select a tuning range number. (See the table on left.)

6

6 Press and hold the **CH/TRK** button to start searching for BBC1. 13

Higher numbered channel

CH/TRK

Lower numbered channel

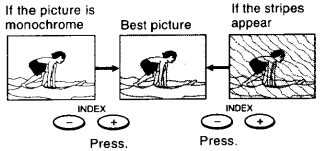
If the received TV signal is not BBC1, press and hold the **SHIFT** button again.

(continued)

MANUAL SET UP

(continued)

7 If a clear picture does not appear on the TV screen after searching is finished, make fine adjustment with the INDEX (-) (+) buttons. 3 4



8 Repeat steps *5* to *7* for other TV stations, and for satellite stations if your satellite receiver is not connected by a SCART.

Record all position numbers you stored on the VTR in the chart (GUIDE Channel Table) so that you will be ready to use the Video Plus+ Deluxe programming system recording.

9 Press the **MENU** button. 5
Channel tuning is now finished.

Once station storing is done, you can select a TV programme by the position number on which the TV station is stored.

Skipping Channels

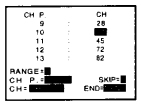
You can prevent the use of certain position numbers.

1) Set the VTR to the tuning mode following steps *1* to *4* of the station storing procedure.

2) Select the position number you want to skip with the **SHIFT** button. 14

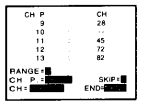
Example **To skip position number 10.**

SHIFT



3) Press **number button 3**. 1
The following indication will appear in the VTR display with the skip function on or off.

3



If you press **number button 3** again, the TV channel number will appear and the skip function will be cancelled. 1

4) Press the **MENU** button to exit. 5

To cancel channel skipping
Follow steps **1)** to **4)** above.

GUIDE Channel Table

TV stations	GUIDE	Position number in which the TV station has been memorized on the VTR.
BBC1	001	1
BBC2	002	2
ITV	003	3
CHANNEL 4	004	4
CHANNEL 5	005	5
RTE (IRELAND)	006	
NETWORK 2 (IRELAND)	007	

STATION NAME	VIDEO Plus+ SYSTEM GUIDE CHANNEL	SKY ORDER	ASTRA ORDER	PERSONAL PREFERENCE
SKY ONE	101	1	8	
SKY NEWS	102	2	12	
SKY MOVIE MAX	103	3	16	
SKY PREMIERE	104	4	18	
THE DISNEY CHANNEL	111	5	26	
SKY BOX OFFICE 1	111	5	26	
SKY SPORT 1	105	6	20	
NICKELODEON	106	7	46	
PARAMOUNT COMEDY CH.	106	7	46	
EBN	125	8	42	
TROUBLE	125	8	42	
BRAVO	125	8	42	
DISCOVERY HOME & LEISURE	124	9	41	
DISCOVERY	124	9	41	
UK GOLD	123	11	23	
QVC	136	12	38	
LIVING	130	13	34	
THE FANTASY CHANNEL	130	13	34	
MTV	109	14	15	
VH1	145	15	22	
SKY SPORTS 2	140	16	47	
SKY SPORTS 3	148	17	31	
PLAYBOY CHANNEL	148	17	31	
TV SHOP	148	17	31	
FOX KIDS	119	18	7	
NATIONAL GEOGRAPHIC	119	18	7	
GRANADA PLUS	131	19	3	
MEN & MOTORS	131	19	3	
WEATHER	127	20	60	
RACING	127	20	60	
SKY BOX OFFICE 2	127	20	60	
SKY BOX OFFICE 3	132	21	59	
SKY SCOTTISH	132	21	59	
GRANADA GOOD LIFE	142	22	58	
COMPUTER CHANNEL	142	22	58	
SKY BOX OFFICE 4	142	22	58	
CMT	138	24	51	
CHRISTIAN CHANNEL	122	26	24	
SOAP	122	26	24	
HISTORY	122	26	24	
SCI-FI	122	26	24	
TRAVEL	129	27	60	
SKY CINEMA	129	27	60	
CARTOON NETWORK	149	29	37	
TNT	149	29	37	
EUROSPORT	107	30	4	
CNN	126	31	28	

* 1 Note: It is important that you check that your VIDEO Plus+ programming system Guide channel order stored on your VTR is the same order as your Satellite Receiver otherwise VIDEO Plus+ programming system will not work correctly.

GUIDE Channel Setting for TV Channels Manually

VIDEO Plus+ Deluxe programming system is a timer recording system for an easier programming that requires you only to enter a PlusCode programming number assigned to a desired programme. This section explains the necessary set-up to make VIDEO Plus+ Deluxe programming system recordings.

Information
You can perform timer recording very easily using the VIDEO Plus+ Deluxe programming system of this VTR. Before making a VIDEO Plus+ Deluxe programming system recording, it is necessary to set GUIDE channels in the VTR.

- Clock Setting (page 36)
- Manual Storing of TV Stations (page 37)
- Setting to Control Satellite Channels (pages 32, 33) (When using a satellite receiver)
  - Satellite input setting
  - Brand code setting
  - GUIDE channel setting

  GUIDE channels for satellite channels are automatically set when you choose SKY or ASTRA. If you correct the setting, or if your satellite receiver is not SKY or ASTRA, use the procedure on page 33.
- GUIDE Channel Setting (pages 35) (VIDEO Plus+ Deluxe PROGRAMMING SYSTEM SET-UP)
  - GUIDE Channel Setting for TV Channels Manually
  - GUIDE Channel Setting for Satellite Channels
- VIDEO Plus+ Deluxe PROGRAMMING SYSTEM RECORDING (page 16)

Important
There is no need to perform this procedure if the TV stations have been stored to the position numbers (1 for BBC1, 2 for BBC2, 3 for ITV, 4 for CHANNEL 4 and 5 for CHANNEL 5) on the VTR (page 12).

Preparation
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR. 28

1 Press the **MENU** button to display the MAIN MENU screen. 5

2 Press **number button 3** to select "INSTALLATION". 1

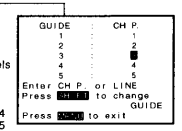
3

INSTALLATION MENU
1 AUTO SET UP
2 MANUAL SET UP
3 SATELLITE SETTING
SAT. CONNECTION (SAT)
SAT. BRAND NO. (17)
4 VIDEO PLUS+ GUIDE CH
Press 1 2 to select
Press MENU to exit

3 Press **number button 4** to select "VIDEO PLUS+ GUIDE CH". 1

4

GUIDE channels
1: BBC1
2: BBC2
3: ITV
4: CHANNEL 4
5: CHANNEL 5



GUIDE channels 1 to 5 have been factory set to position numbers 1 to 5 respectively.
Make sure that the numbers are matched as above.

Note
To set another TV channel, select the GUIDE channel using the SHIFT button, and in the "CH P." column enter the position number in which you have stored the TV station by number buttons.

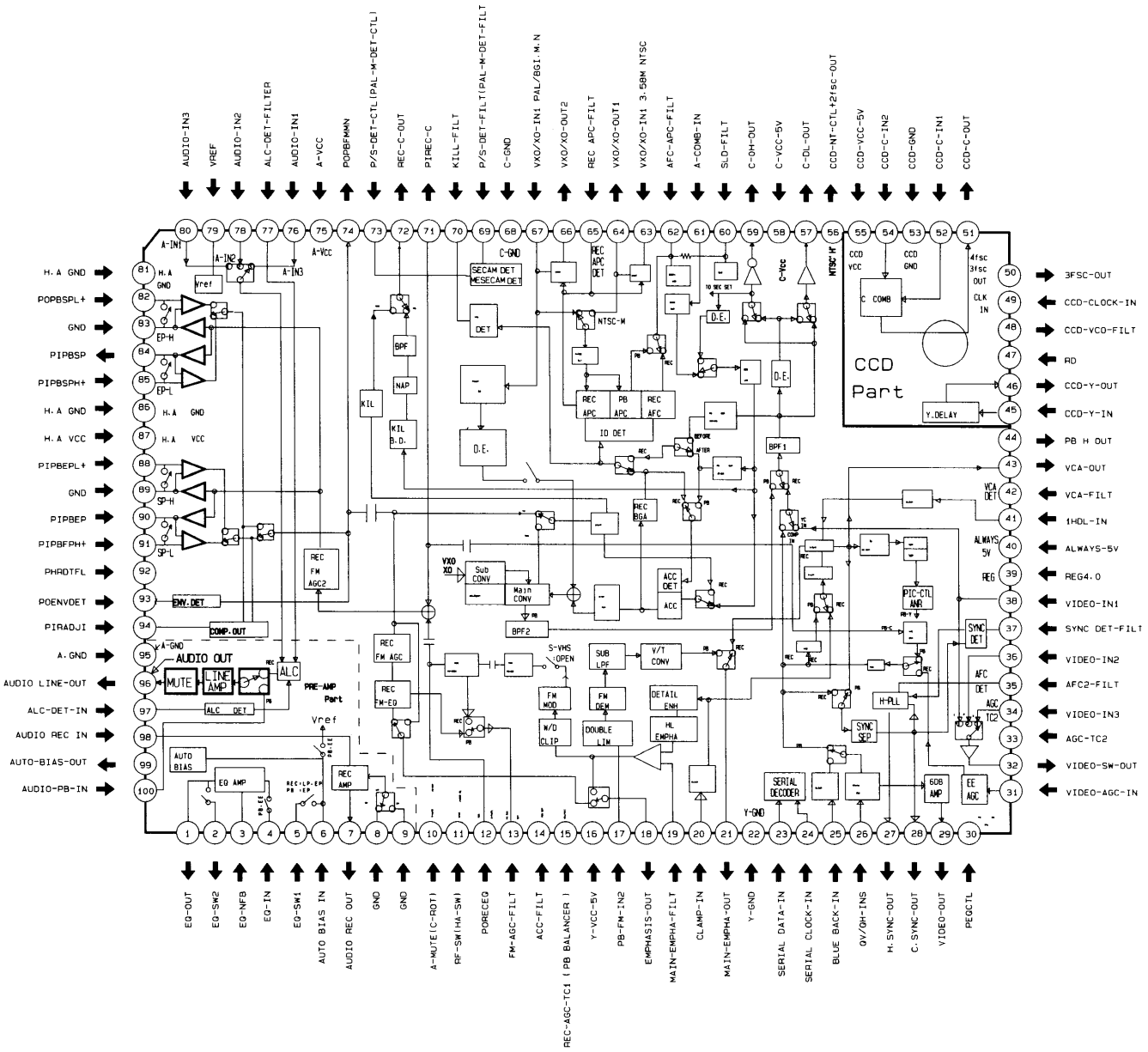
4 Press the **MENU** button three times to exit. 5
The GUIDE channel setting for TV channels is complete.

Now you can make a VIDEO Plus+ Deluxe programming system recording of TV programmes. (See page 16.)

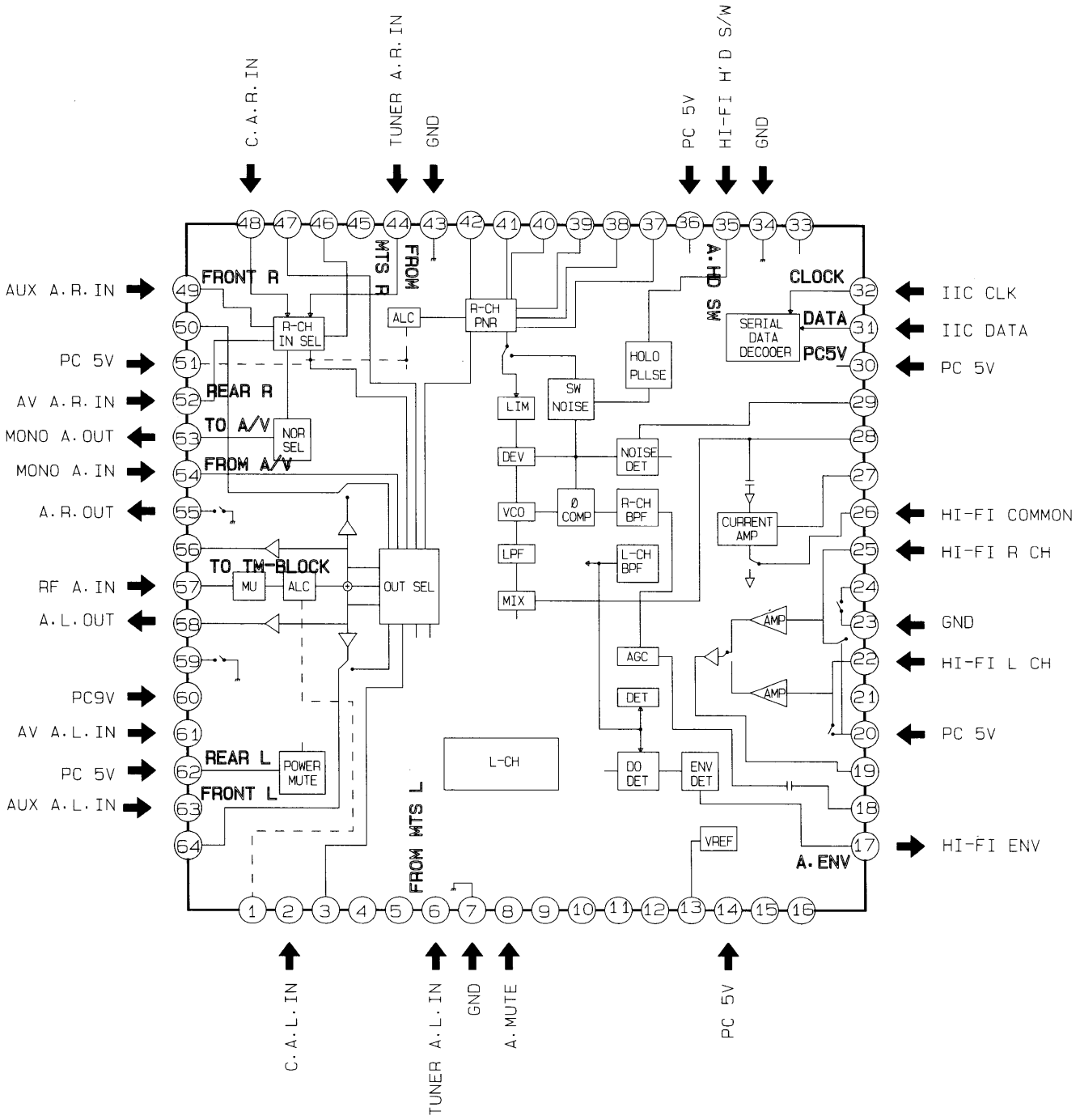
If you use a satellite receiver, make the GUIDE channel setting for satellite channels as well.

2-2 IC Blocks

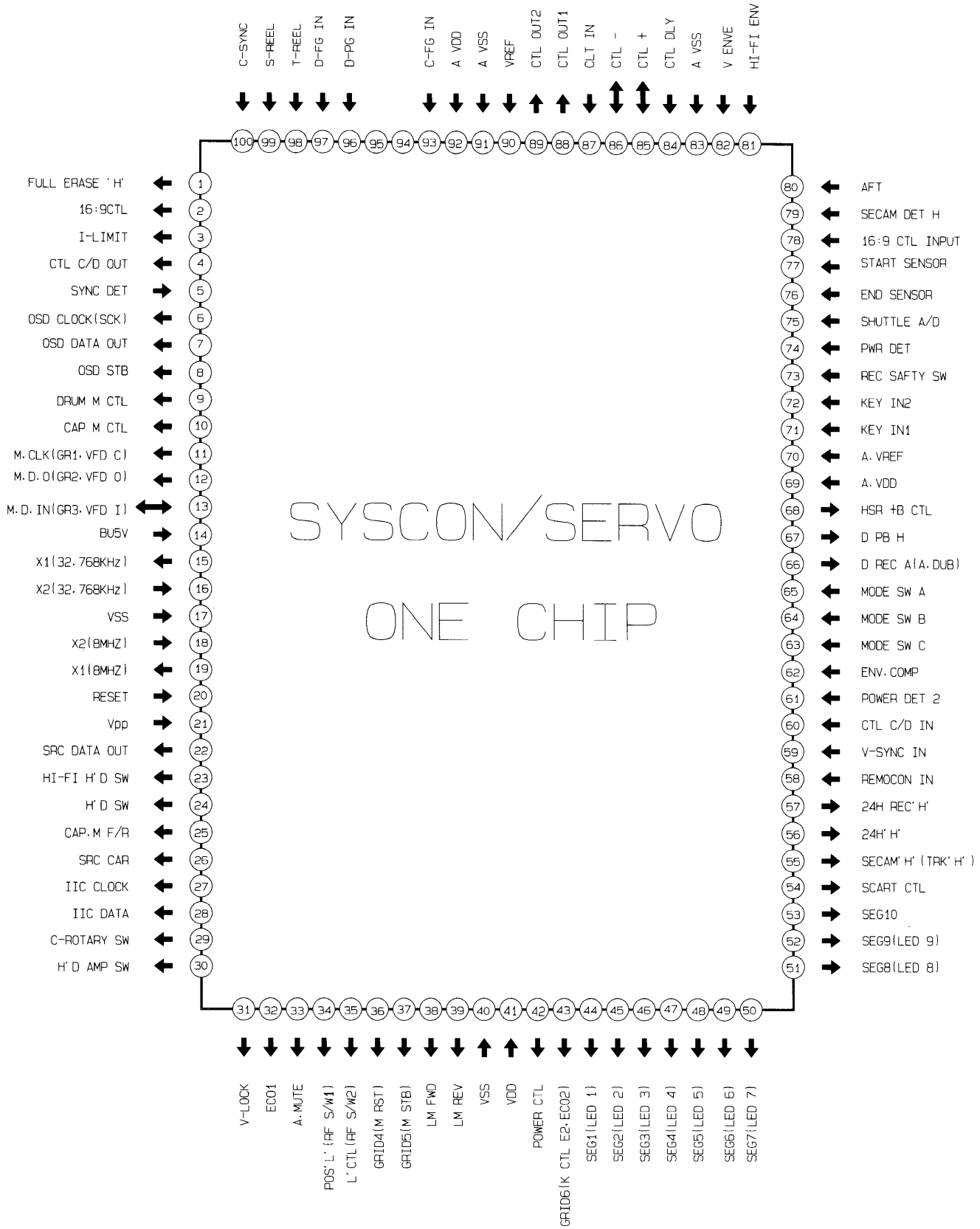
2-2-1 IC301 (LA71590M)



2-2-2 IC501 (LA72634AM)



2-2-3 IC601 (uPD784927GF)



3. Product Specifications

Specifications and features are subject to change without notice.

OPERATION	DESCRIPTION
Power supply	230V/240V ("B" Models), 230V ("F/G/W" Models) AC, 50Hz
Power consumption	18 Watts (Hi-Fi Models), 16 Watts (Non Hi-Fi Models)
External dimensions	360 (W) x 94 (H) x 298 (D) mm
Mass	4.2 kg
Receiing channels	B : VHF A-J (IRE), UHF 21-69, CATV X, Y, Z S1-41 G : VHF E2-12 R2-12 A-H, UHF 21-69, CATV X, Y, Z S1-41 F : VHF E2-12 F1-6 FB-FC, UHF E21-69, CATV X, Y, Z B-Q S1-41 70-92 W : VHF E2-12 R2-12 A-H, UHF 21-69, CATV X, Y, Z S1-41
Format	VHS standard
Video signal system	CCIR 625 lines, 50 fields, PAL colour signal, 525 lines NTSC colour (PB only)
Recording system/Playback system	B : PAL SP, LP VHS format G/W : PAL/MESECAM SP, LP VHS format F : PAL/MESECAM/SECAM SP, LP VHS format PAL/MESECAM/SECAM SP VHS format (V-229F/V-219F)
NTSC playback	NTSC SP/SLP tape playback : NT4.43/NT PB ON PAL TV (V-229F/V-219F is SP only)
Fast forward/Rewind time	Within approx. 150s (When E-180 video cassette is used)
Aerial input/output	75 ohm coaxial
Video input/output	AUDIO/VIDEO SCART socket, 1.0Vp-p, 75ohm
Audio input	AUDIO/VIDEO SCART socket, more than 1.0Kohm
Audio output	AUDIO/VIDEO SCART socket, less than 1.0Kohm
Audio frequency range	20Hz - 20KHz (Hi-Fi model only)
Operating conditions	Temperature : +5°C - +40°C Humidity : less than 80% RH

4. Disassembly and Reassembly

4-1 Cabinet Assembly

4-1-1 Cabinet Top Removal

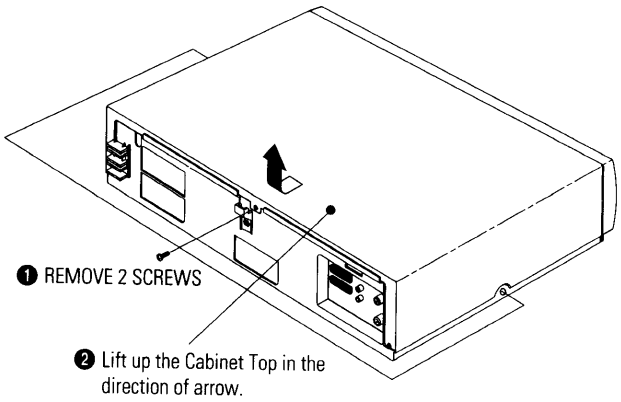


Fig. 4-1 Cabinet Top Removal

4-1-2 Bottom Cover Removal

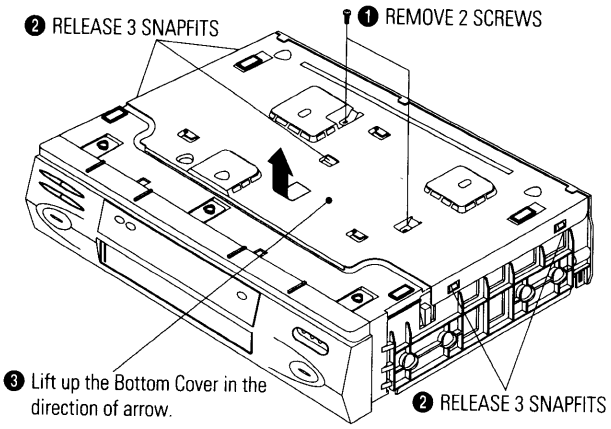


Fig. 4-2 Bottom Cover Removal

4-1-3 Ass'y Front Panel Removal

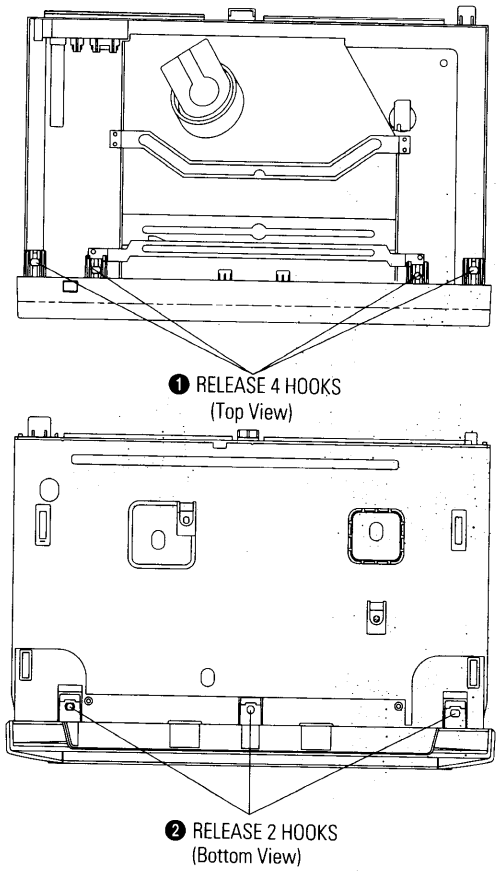


Fig. 4-3 Ass'y Front Panel Removal

4-1-4 Jack PCB Removal

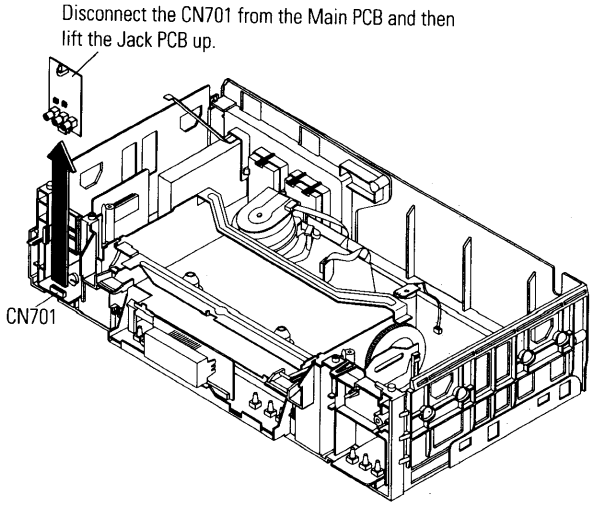


Fig. 4-4 Jack PCB Removal

4-1-5 Chassis Removal

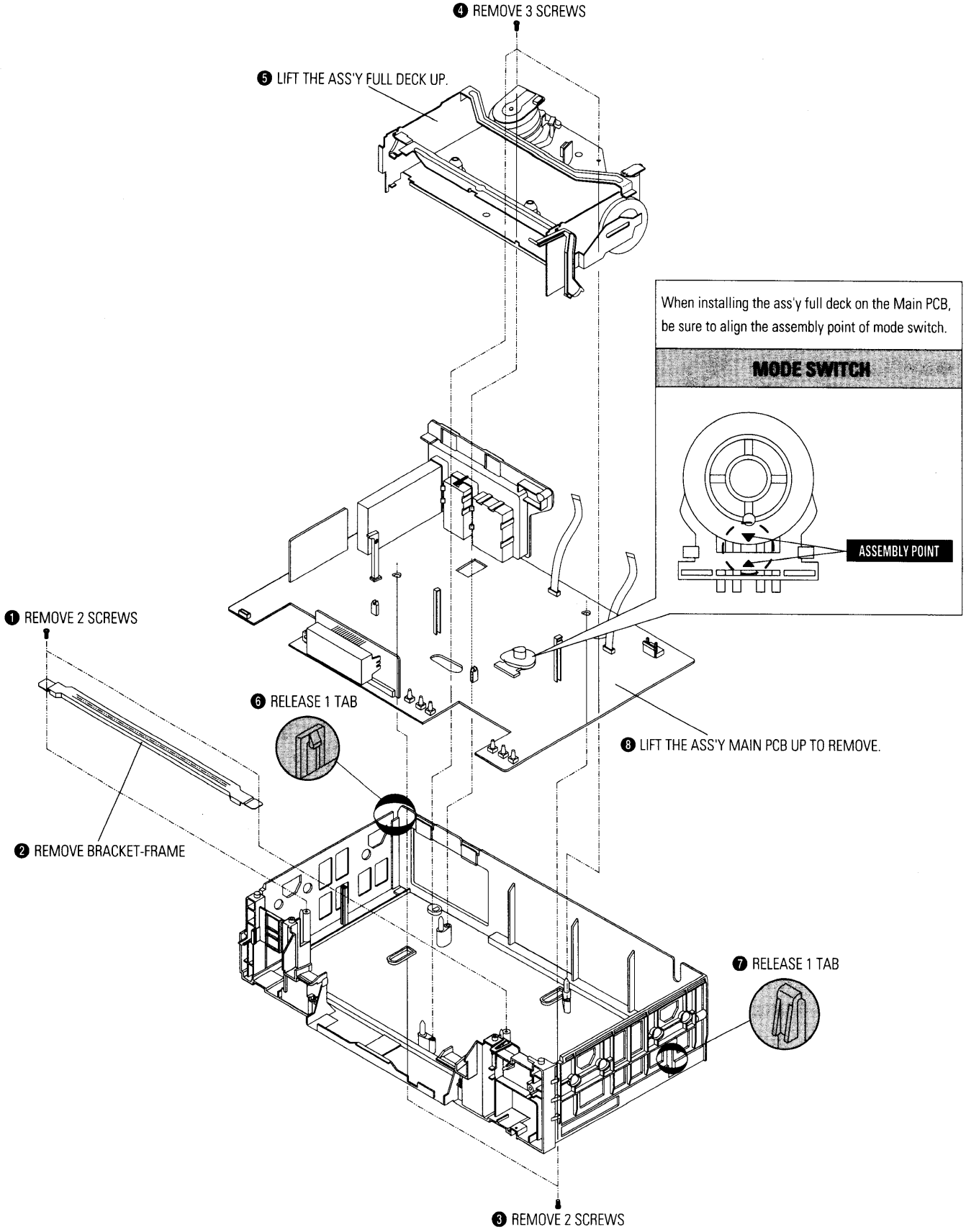

❹ REMOVE 3 SCREWS
❺ LIFT THE ASS'Y FULL DECK UP.
When installing the ass'y full deck on the Main PCB, be sure to align the assembly point of mode switch.
MODE SWITCH
ASSEMBLY POINT
❶ REMOVE 2 SCREWS
❻ RELEASE 1 TAB
❽ LIFT THE ASS'Y MAIN PCB UP TO REMOVE.
❷ REMOVE BRACKET-FRAME
❼ RELEASE 1 TAB
❸ REMOVE 2 SCREWS

Fig. 4-5 Chassis Removal

4-2 Deck Parts Locations

4-2-1 Top View

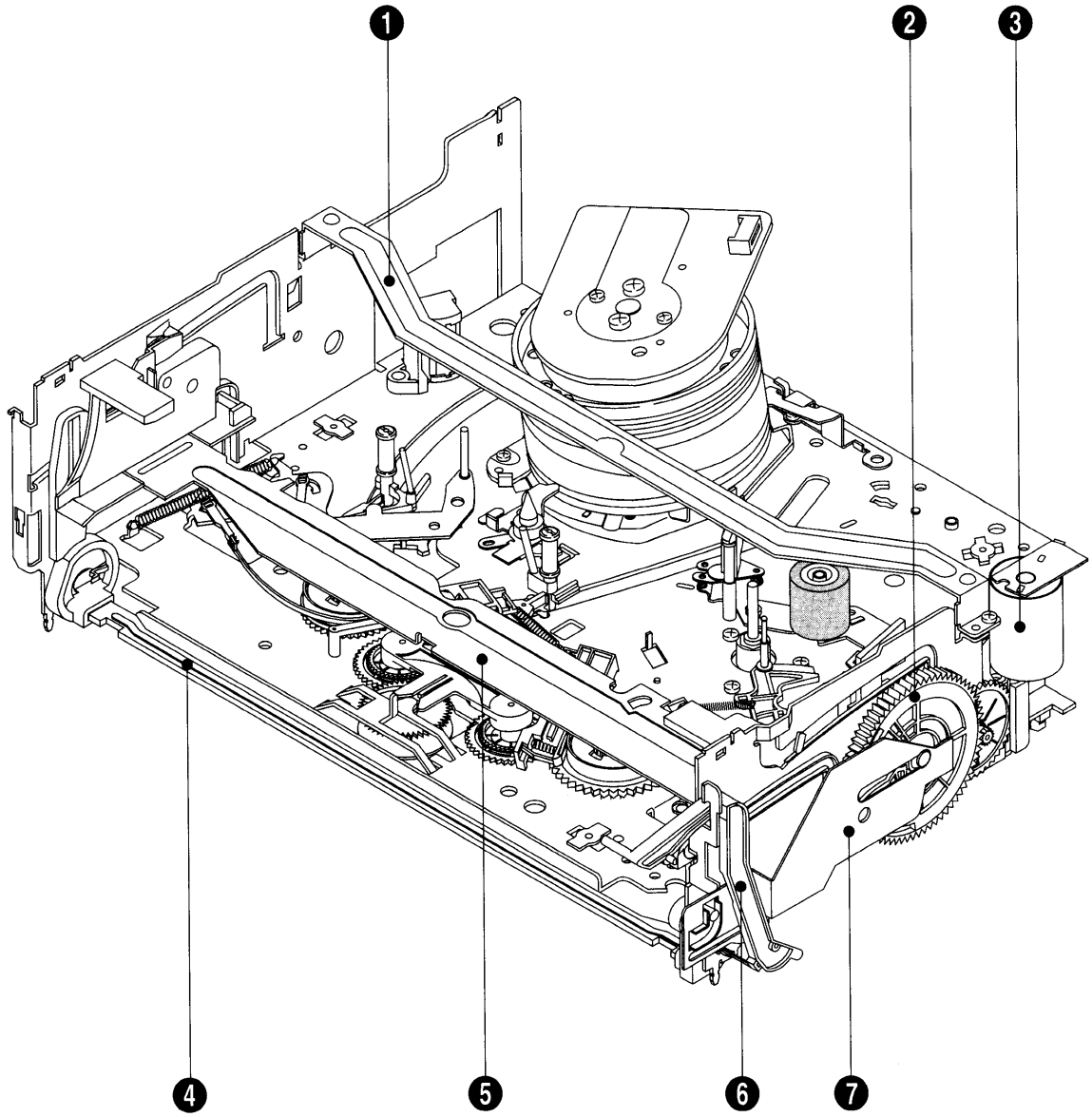


Fig. 4-6 Top parts Location-1

1. BRACKET FL TOP
2. GEAR FL CAM
3. MOTOR LOADING ASS'Y
4. LEVER FL ARM ASS'Y
5. HOLDER FL CASSETTE ASS'Y
6. LEVER FL DOOR
7. SLIDER FL DRIVE

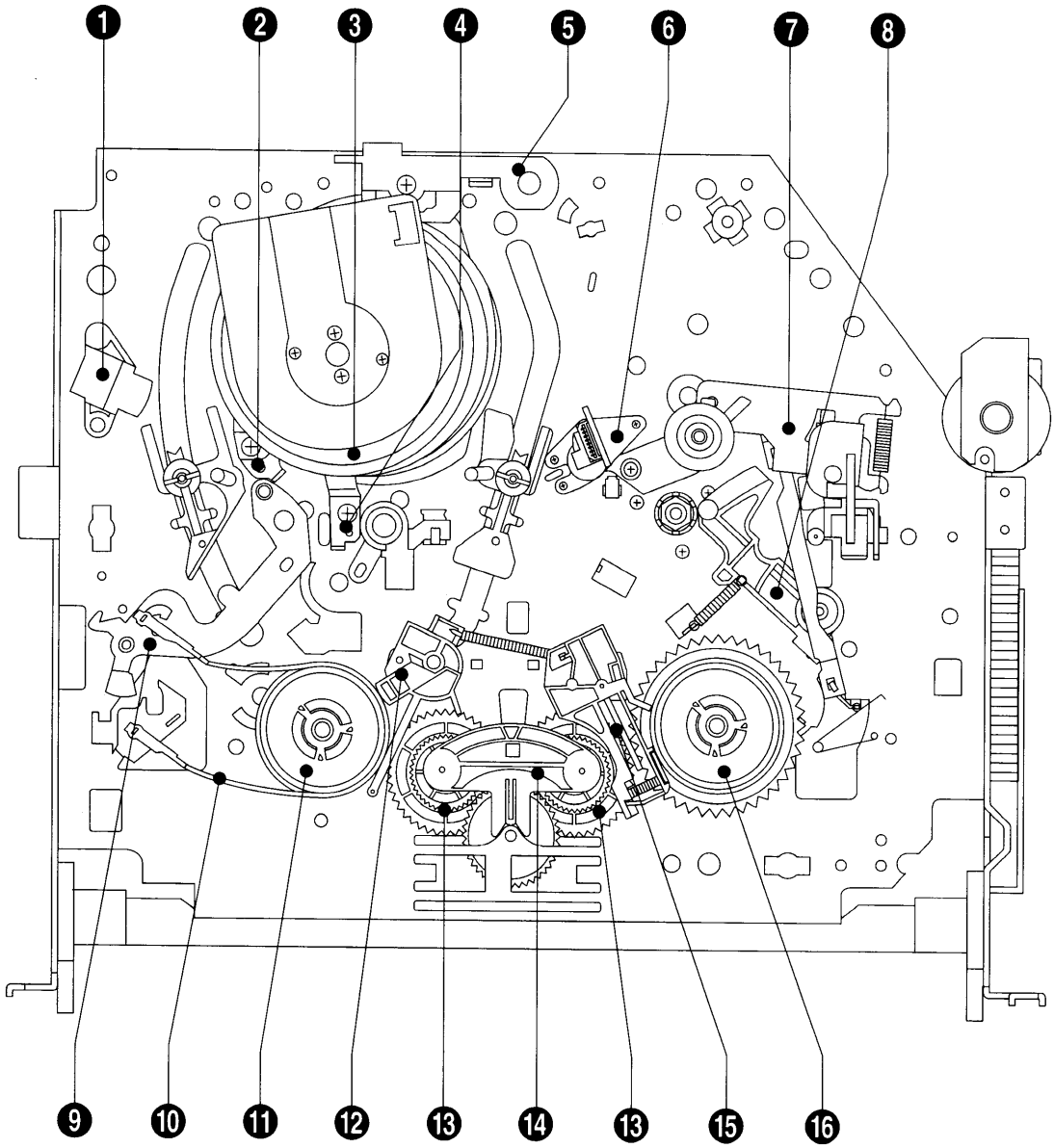


Fig. 4-7 Top Parts Location-2

1. FE HEAD
2. PLATE CYLINDER C
3. CYLINDER ASS'Y
4. PLATE CYLINDER B
5. PLATE CYLINDER A
6. ACE HEAD ASS'Y
7. UNIT PINCH ASS'Y
8. LEVER #9 GUIDE ASS'Y
9. LEVER TENSION ASS'Y
10. BAND BRAKE ASS'Y
11. DISK S REEL
12. LEVER S BRAKE ASS'Y
13. GEAR IDLE
14. LEVER IDLE
15. LEVER T BRAKE ASS'Y
16. DISK T REEL

4-2-2 Bottom View

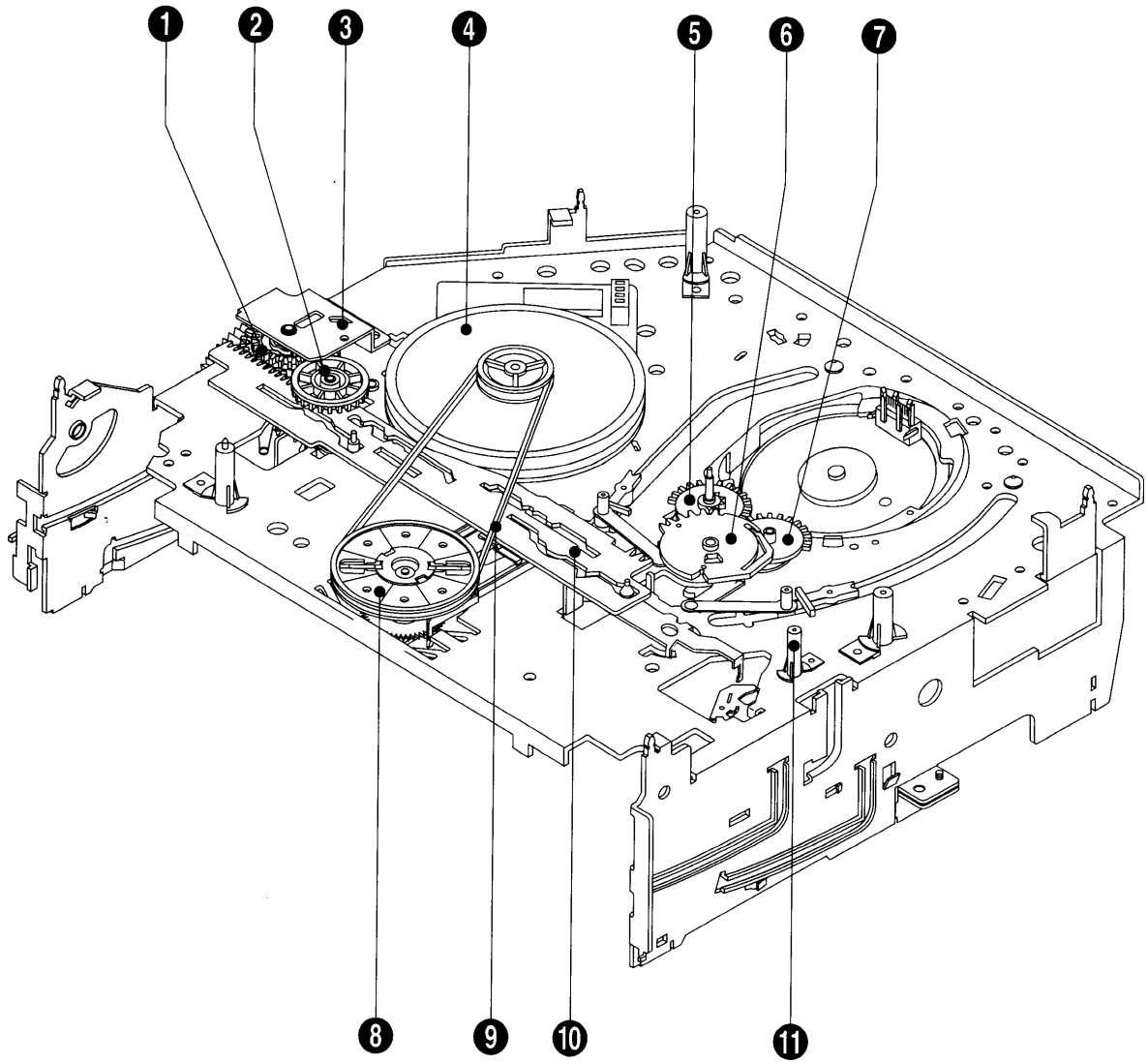


Fig. 4-8 Bottom Parts Location

1. GEAR JOINT 1
2. GEAR JOINT 2
3. BRAKET GEAR
4. MOTOR CAPSTAN ASS'Y
5. LEVER T LOAD ASS'Y
6. GEAR LOADING DRIVE
7. LEVER S LOAD ASS'Y
8. HOLDER CLUTCH ASS'Y
9. BELT PULLEY
10. SLIDER CAM
11. SLEEVE TENSION

4-3 Main Deck

4-3-1 Bracket FL Top Removal

1) Remove 2 screws ❶.
2) Remove the Bracket FL Top ❷.

Note : Take care not to change assembly direction.

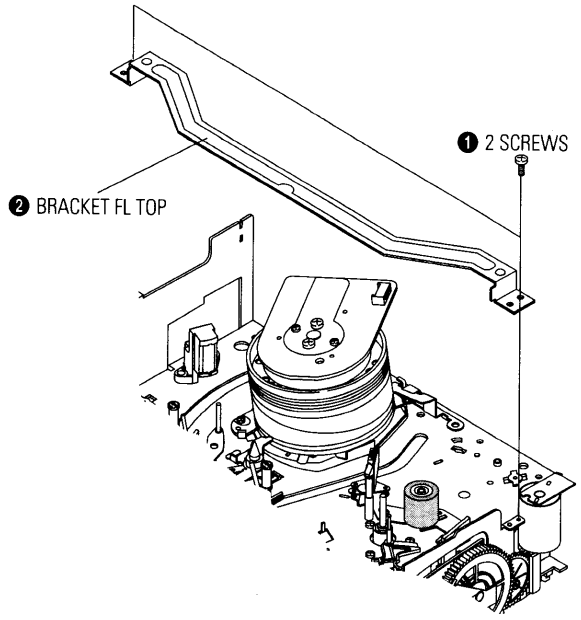


Fig. 4-9 Bracket FL Top Removal

4-3-2 Lever FL Door Removal

1) Rotate the Lever FL Door ❶ in the direction of arrow "A".
2) Release the Hook ❷, remove the Lever FL Door ❶ in the direction of arrow "B".

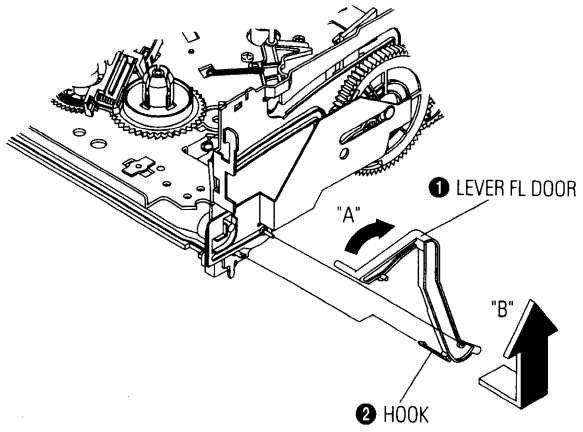


Fig. 4-10 Lever FL Door Removal

4-3-3 Holder FL Cassette Ass'y Removal

1) Remove the Lever FL Door. (Refer to Fig. 4-10)
2) Pull the Holder FL Cassette Ass'y ❶ to the eject position.
3) Pull the Holder FL Cassette Ass'y ❶ as grasping the Holder FL Cassette Ass'y ❶ and Lever FL Cassette-R ❷ in the same time to release hooking from Main Base until the Boss [A], [B] of Holder FL Cassette Ass'y ❶ is taken out from the Rail [C], [D].
4) Lift the Holder FL Cassette Ass'y ❶ in the direction of arrow "B" in this time, you have to grasp the Lever FL Cassette-R ❷ continuously until the Holder FL Cassette Ass'y ❶ is taken out completely.

Note : Be sure to insert Lever FL Cassette-R ❷ in the direction of "A" to prevent separation and breakage of the Lever FL Cassette-R ❷ at disassembling and reassembling.

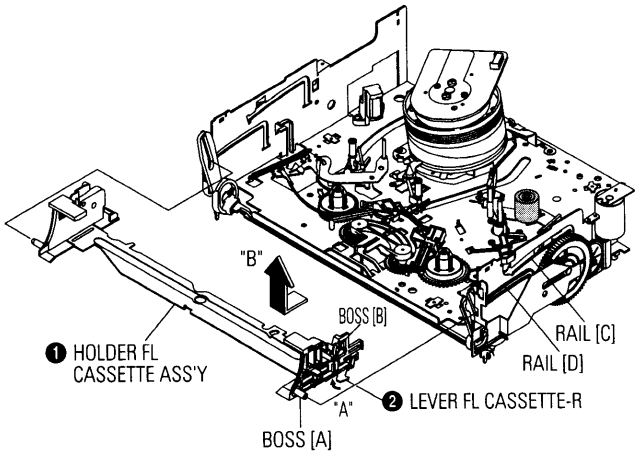


Fig. 4-11 Holder FL Cassette Ass'y Removal

4-3-4 Lever FL Arm Ass'y Removal

1) Remove the Lever FL Door. (Refer to Fig. 4-10)
2) Remove the Holder FL Cassette Ass'y. (Refer to Fig. 4-11)
3) Release the Hook ❶ in the direction of arrow "A", pull out the Lever FL Arm Ass'y ❹ from the Boss of Main Base.
4) Remove the Lever FL Arm Ass'y ❹ in the direction of arrow "B".

Assembly : When reinstalling, be sure to reassemble Lever FL Arm Ass'y ❹ after you insert the Boss ❷ in Groove [A] of Slider FL Drive ❸.

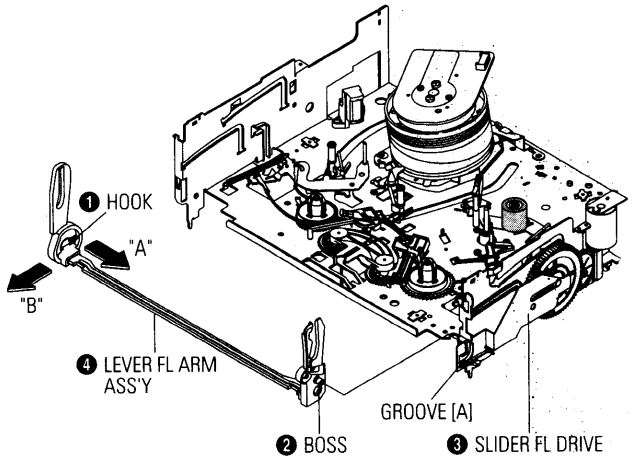


Fig. 4-12 Lever FL Arm Ass'y Removal

4-3-5 Slider FL Drive Removal

1) Pull the Slider FL Drive ❶ to the front direction.
2) Remove the Slider FL Drive ❶ in the direction of arrow. (Refer to Fig. 4-13)

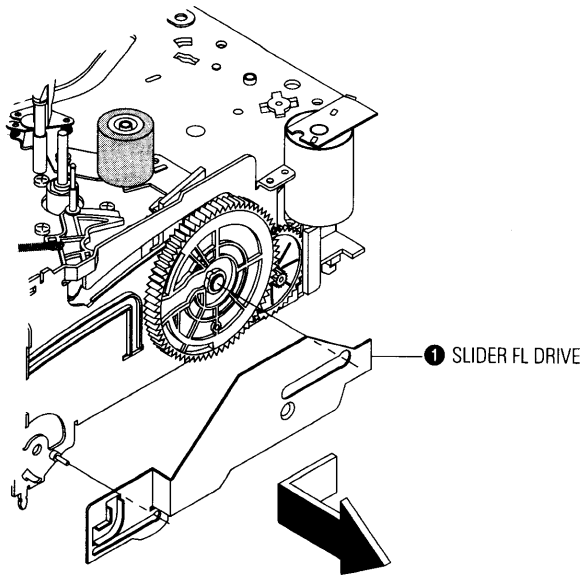


Fig. 4-13 Slider FL Drive Removal

4-3-6 Bracket Gear, Gear FL Cam, Gear Joint 1, 2 Removal

1) Remove screw ❶.
2) Lift the Bracket Gear ❷.
3) Remove the Gear FL Cam ❸.
4) Lift the Gear Joint 2 ❹, Gear Joint 1 ❺.

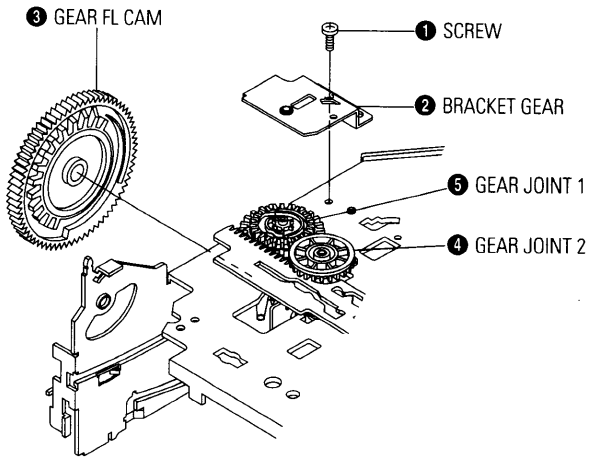


Fig. 4-14 Bracket Gear, Gear FL Cam, Gear Joint 1, 2 Removal

4-3-7 Assembly of Gear FL Cam, Gear Joint 1, 2

1) Be sure to align dot mark of Gear Joint 1 ❶ with dot mark of Gear Joint 2 ❷ as shown Fig. 4-15 (Refer to Timing Point 1), confirm the Timing Point 2 of the Gear Joint 2 ❷ and Slider Cam ❸.
2) Align the Gear FL Cam ❹ with the Gear Worm Wheel Post as shown detail drawing. (Refer to Timing Point 3)

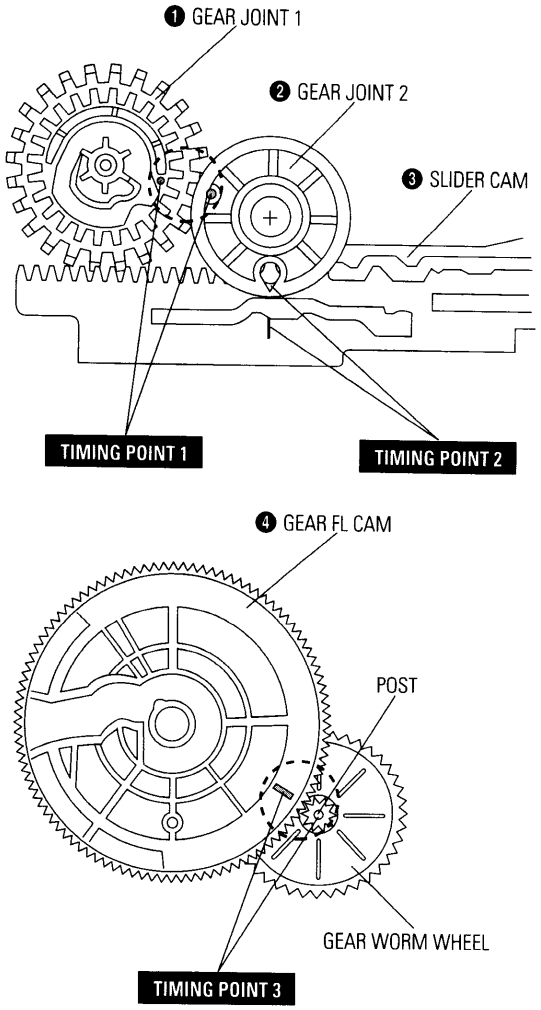


Fig. 4-15 Assembly of Gear FL Cam, Gear Joint 1, 2

4-3-8 Holder Worm, Gear Worm, Gear Worm Wheel Removal

1) Release the Hook [A] in the direction of arrow and, remove the Holder Worm ❶.
2) Remove the Gear Worm ❷.
3) Remove the Gear Worm Wheel ❸. (After removing the Gear FL Cam as shown Fig. 4-14)

Note : Secure the Hook [A] after installing the Holder Worm ❶.

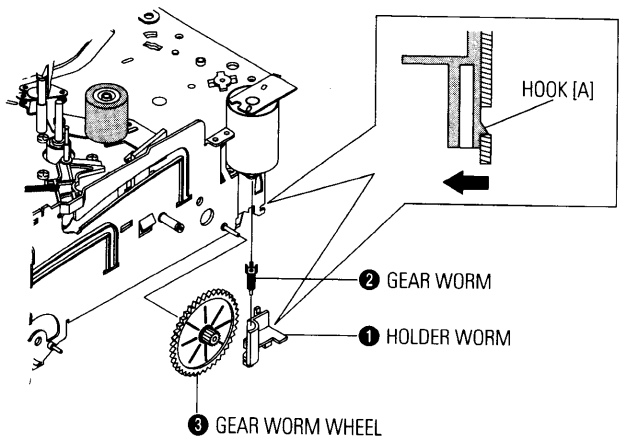


Fig. 4-16 Holder Worm, Gear Worm, Gear Worm Wheel Removal

4-3-9 Motor Loading Ass'y Removal

1) Remove the screw ❶.
2) Remove the Motor Loading Ass'y ❷.

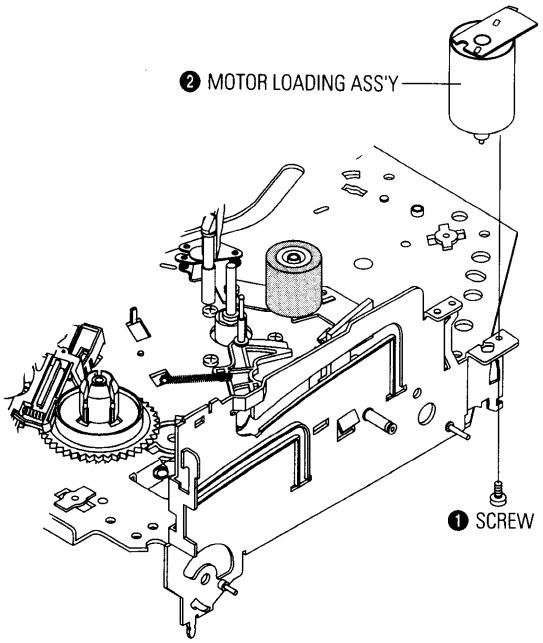


Fig. 4-17 Motor Loading Ass'y Removal

4-3-10 Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y Removal

1) Remove the Belt Pulley. (Refer to Fig. 4-34)
2) Remove the Gear Loading Drive ❶ after releasing Hook [A] in the direction arrow as shown in detail drawing.
3) Remove the Slider Cam ❷.
4) Remove the Lever T, S Load Ass'y ❸, ❹.

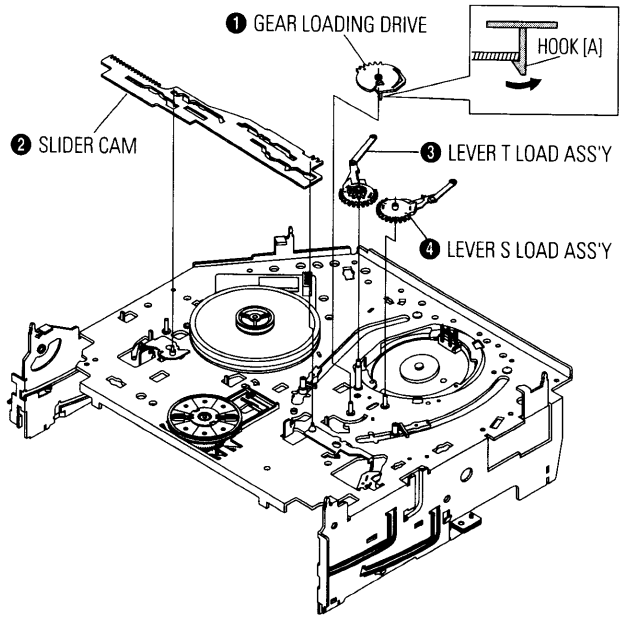


Fig. 4-18 Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y Removal

4-3-11 Assembly of Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y

1) When reinstalling, be sure to align dot of Lever T Load Ass'y ❶ with dot of Lever S Load Ass'y ❷ as shown in drawing. (Refer to Timing Point 1)
2) Insert the Pin A, B, C, D into the Slider Cam ❸ hole.
3) Be sure to align dot of Lever T Load Ass'y and dot of Gear Loading Drive ❹. (Refer to Timing Point 2)
4) Align dot of Gear Loading Drive with mark of Slider Cam as shown in drawing. (Refer to Timing Point 3)

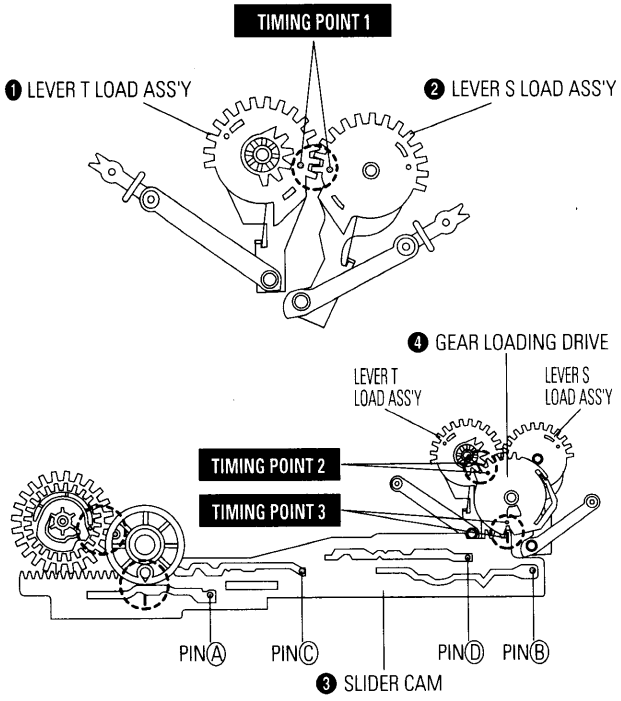


Fig. 4-19 Assembly of Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y

4-3-12 Lever Tension Ass'y, Band Brake Ass'y, Sleeve Tension Removal

1) Remove the Spring Tension ❶.
2) In bottom side of Deck, remove the Sleeve Tension ❷ after rotating it right or left as lifting locking edge of Sleeve Tension.
3) Remove the side "a" of the Band Brake Ass'y ❹ in the direction of arrow "A" from the Lever Tension Ass'y ❸.
4) Remove the side "b" of the Band Brake Ass'y ❹ in the direction of arrow "B" from the Main Base.

Note :
1) When replacing the Lever Tension Ass'y, be sure to apply oil in the Sleeve Tension.
2) Take care not to touch stain on the felt side, and not to be folded and broken Band Brake Ass'y.

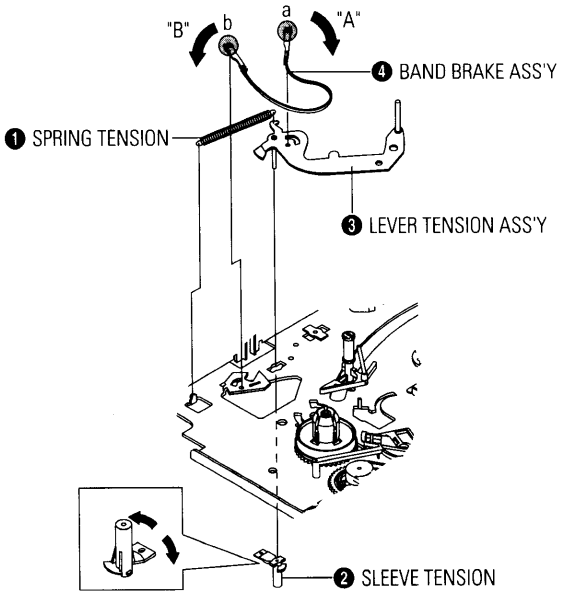


Fig. 4-20 Lever Tension Ass'y, Band Brake Ass'y, Sleeve Tension Removal

4-3-13 Lever S, T Brake Ass'y Removal

1) Release the Hook [A] and the Hook [B], [C] in the direction of arrow as shown in Fig. 4-21.
2) Lift the Lever S, T Brake Ass'y ❶, ❷ with Spring Brake ❸.

Assembly :
1) Assembly the Lever S Brake Ass'y ❶ on the Main Base.
2) Assembly the Lever T Brake Ass'y ❷ with Spring Brake ❸.

Note : Take extreme care not to be folded and transformed spring Brake at removing or reinstalling.

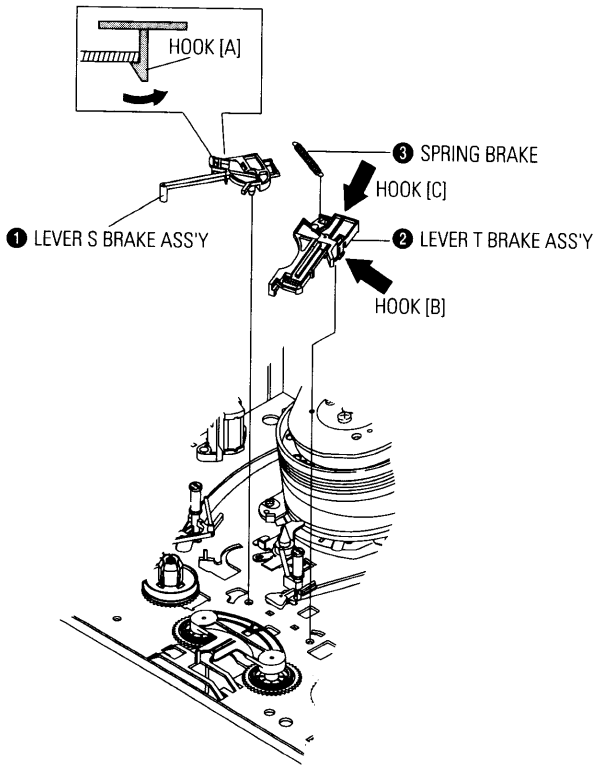


Fig. 4-21 Lever S, T Brake Ass'y Removal

4-3-14 Lever Idle Ass'y Removal

1) Push the Lever Idle ❶ in the direction of arrow "A", "B".
2) Lift the Lever Idle ❶.

Assembly :
1) Apply oil in two Bosses of Lever Idle ❶.
2) Assemble the Gear Idle ❷ with the Lever Idle ❶.

Note : When replacing the Gear Idle ❷, be sure to add oil in the boss of Lever Idle ❶.

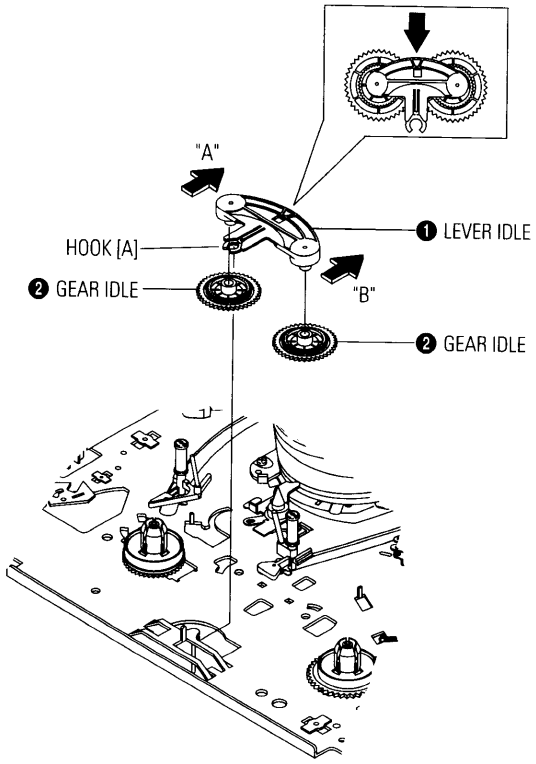


Fig. 4-22 Lever Idle Ass'y Removal

4-3-15 Disk S, T Reel Removal

1) Lift the Disk S, T Reel ❶, ❷.

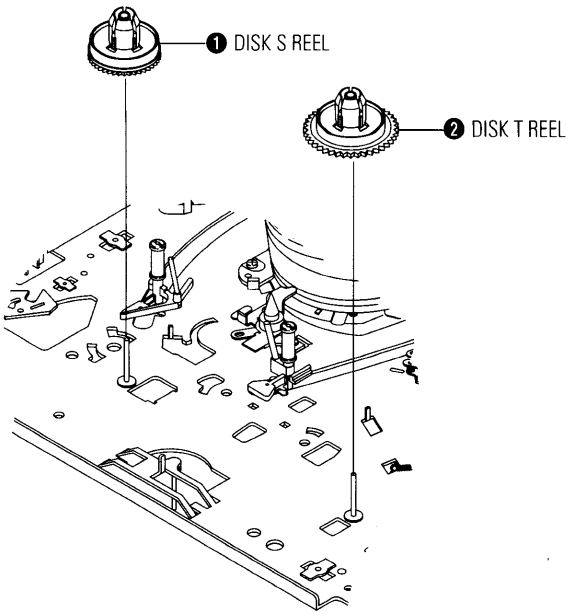


Fig. 4-23 Disk S, T Reel Removal

4-3-16 Holder Clutch Ass'y Removal

1) Remove the Washer Slit ❶.
2) Lift the Holder Clutch Ass'y ❷.

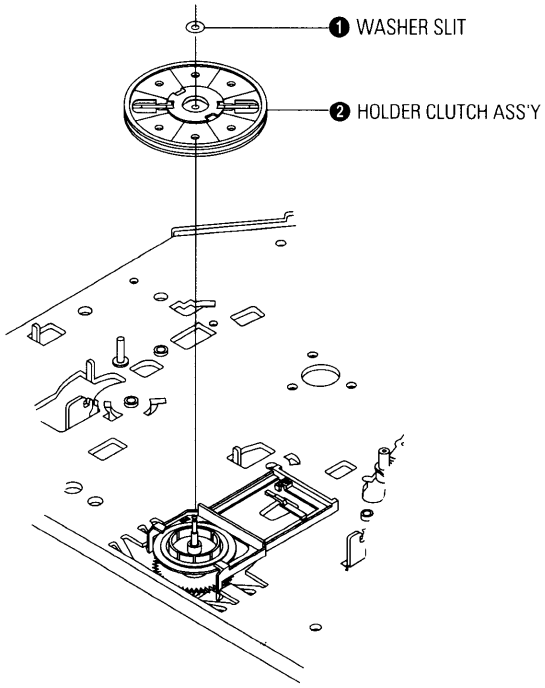


Fig. 4-24 Holder Clutch Ass'y Removal

4-3-17 Lever Up Down Ass'y, Gear Center Ass'y Removal

1) Remove the 2 hooks in the direction of arrow as shown Fig. 4-25 and lift the Lever Up Down Ass'y ❶.
2) Lift the Gear Center Ass'y ❷.

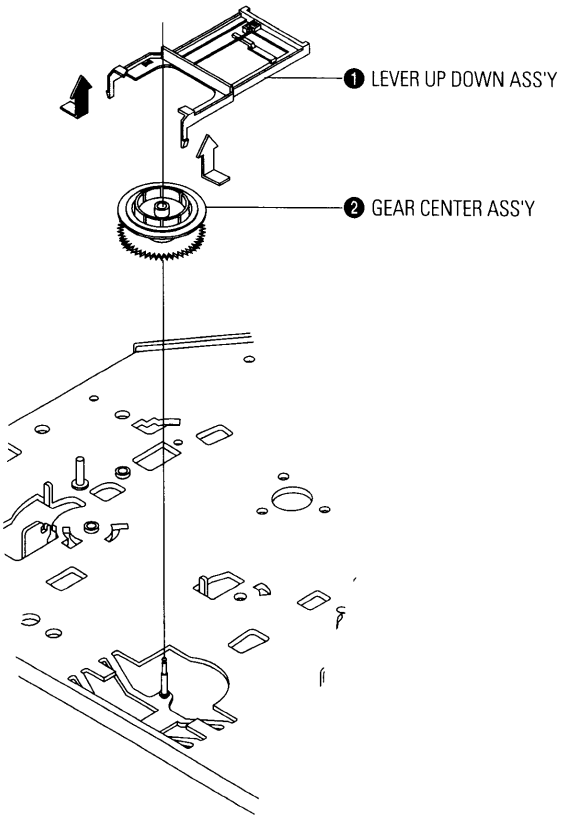


Fig. 4-25 Lever Up Down Ass'y, Gear Center Ass'y Removal

4-3-18 Assembly of Lever Up Down Ass'y, Gear Center Ass'y

1) Insert the Lever Up Down Ass'y ❶ in the 2 rectangular holes on Main Base.
2) Lift the Lever Up Down Ass'y ❶ about 35 degree. (Refer to Fig. 4-26)
3) Insert Ring ❹ of the Gear Center Ass'y ❷ in the Guide ❺ of the Lever Up Down Ass'y ❶.
4) Insert the Gear Center Ass'y ❷ in the post ❻ on Main Base.
5) Push down the Lever Up Down Ass'y ❶ for locking of the Hook ❼.

Note :

1) Take care not to separate and loose the Spring Up Down.
2) When assembling the Gear Center Ass'y, don't push down too much.

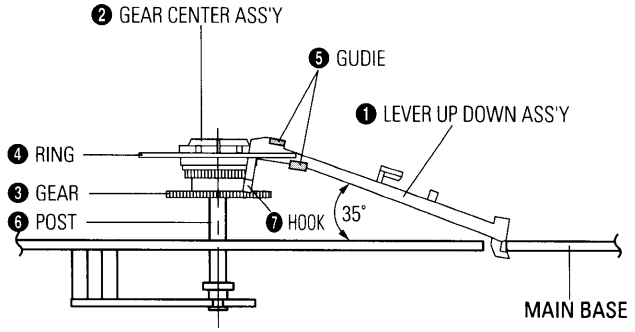


Fig. 4-26 Assembly of Lever Up Down Ass'y, Gear Center Ass'y

4-3-19 Guide Cassette Door Removal

1) Lift the Hook [A].
2) Rotate the Guide Cassette Door ❶ in the direction of arrow.

Note : After reinstalling the Guide Cassette Door ❶ secure the Hook [A].

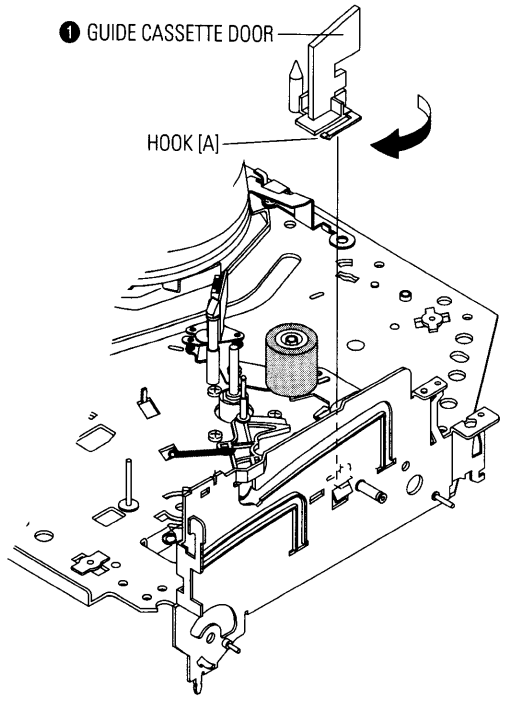


Fig. 4-27 Guide Cassette Door Removal

4-3-20 Unit Pinch Ass'y, Plate Joint, Spring Pinch Drive Removal

1) Lift the Unit Pinch Ass'y ❶.
2) Remove the Plate Joint ❷ from Lever Pinch Drive.
3) Remove the Spring Pinch Drive ❸.

Note :
1) Take extreme care not to touch the grease on the Roller Pinch.
2) When reinstalling, be sure to apply grease on the post pinch roller.

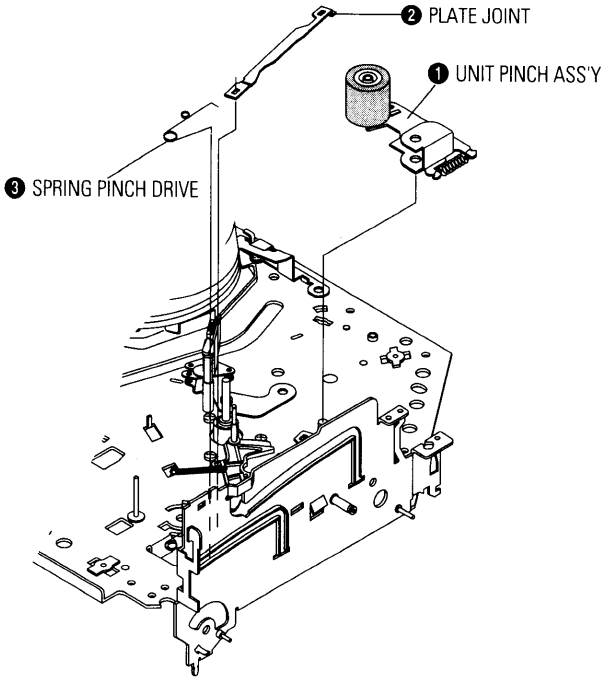


Fig. 4-28 Unit Pinch Ass'y, Plate Joint, Spring Pinch Drive Removal

4-3-21 Lever #9 Guide Ass'y Removal

1) Remove the Spring #9 Guide ❶.
2) Lift the Lever #9 Guide Ass'y ❷ in the direction of arrow.

Note :
1) Take extreme care not to touch the grease on the tape Guide Post.
2) After reinstalling, check the bottom side of the Post #9 Guide to stick to the top side of Main Base.

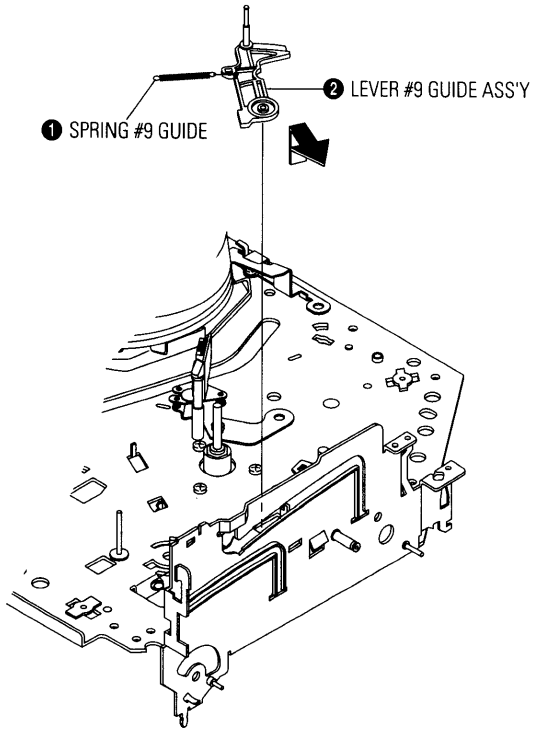


Fig. 4-29 Lever #9 Guide Ass'y Removal

4-3-22 FE Head Removal

1) Remove the screw ❶.
2) Lift the FE Head ❷.

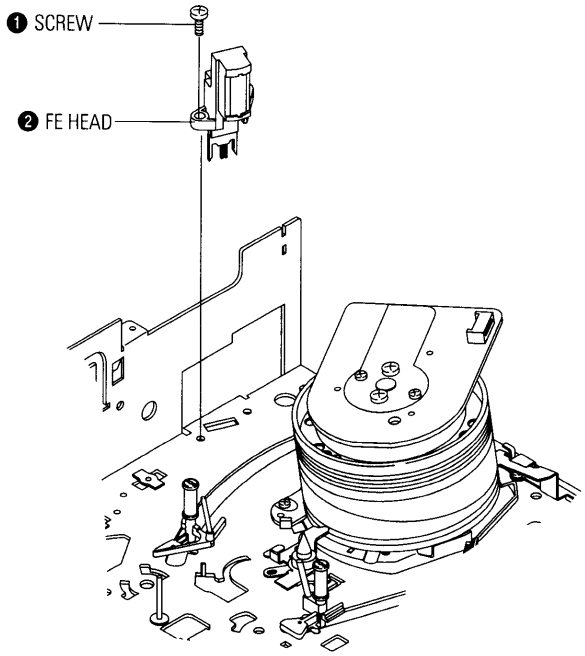


Fig. 4-30 FE Head Removal

4-3-23 ACE Head Removal

1) Pull out the FPC from connector of ACE Head Ass'y ❷.
2) Remove the screw ❶.
3) Lift the ACE Head Ass'y ❷.

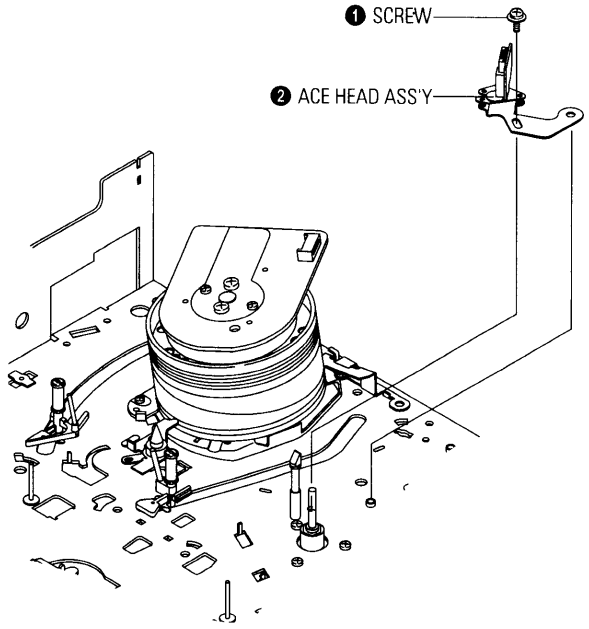


Fig. 4-31 ACE Head Removal

4-3-24 Slider S, T Ass'y Removal

1) Move the Slider S, T Ass'y ❶, ❷ to slot, and then lift it to remove. (Refer to arrow)

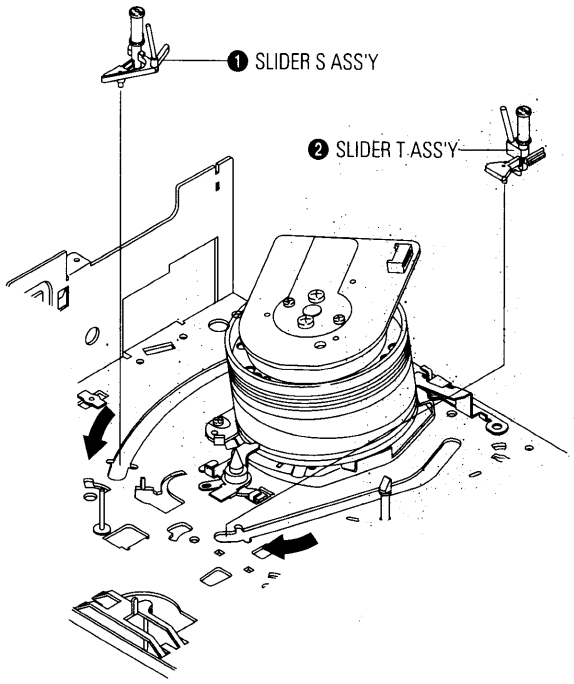


Fig. 4-32 Slider S, T Ass'y Removal

4-3-25 Cylinder Ass'y Removal

1) Remove the 3 Screws ❶, ❸, ❺.
2) Remove the Plate Cylinder A, B, C ❷, ❹, ❻ in the direction of arrow.
3) Lift the Cylinder Ass'y ❼.

Note :
1) When reinstalling, push the Plate Cylinder A, B ❹, ❻ in the reverse of arrow and then, tighten the 2 Screws ❸, ❺.
2) Take care not to touch the Cylinder Ass'y and the tape guide post at reinstalling Plate Cylinder C ❷.
3) Take care not to touch the Cylinder Ass'y with screw driver at reinstalling the Plate Cylinder C ❷.

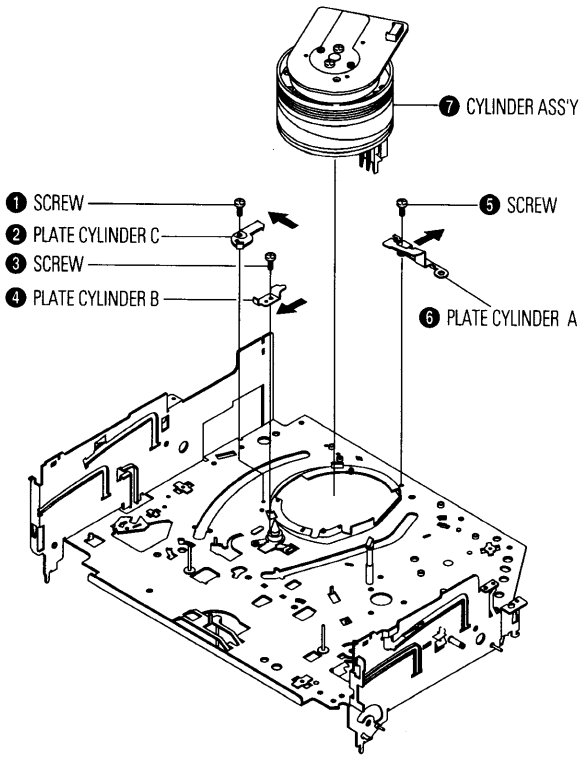


Fig. 4-33 Cylinder Ass'y Removal

4-3-26 Belt Pulley Removal

1) Remove the Belt Pulley ❶.

Note : Take extreme care not to touch the grease on Belt Pulley ❶ at assembling or reassembling.

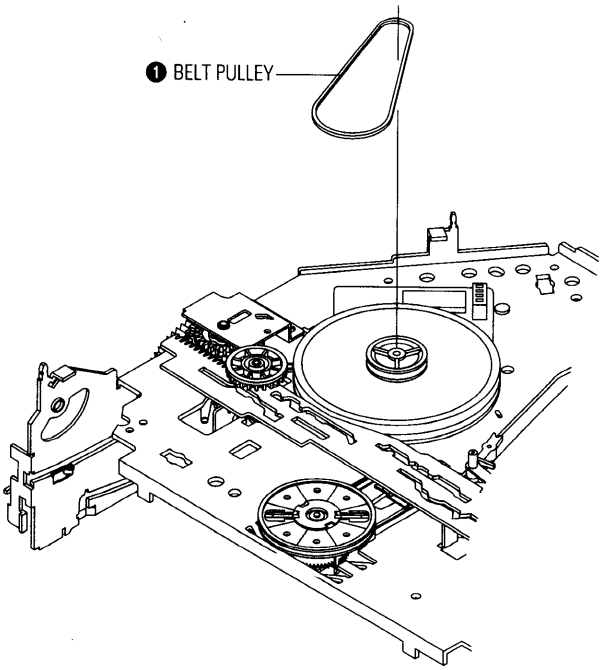


Fig. 4-34 Belt Pulley Removal

4-3-27 Lever Head Cleaner Ass'y Removal

1) Release the Hook ❶.
2) Lift the Lever Head Cleaner Ass'y ❷.

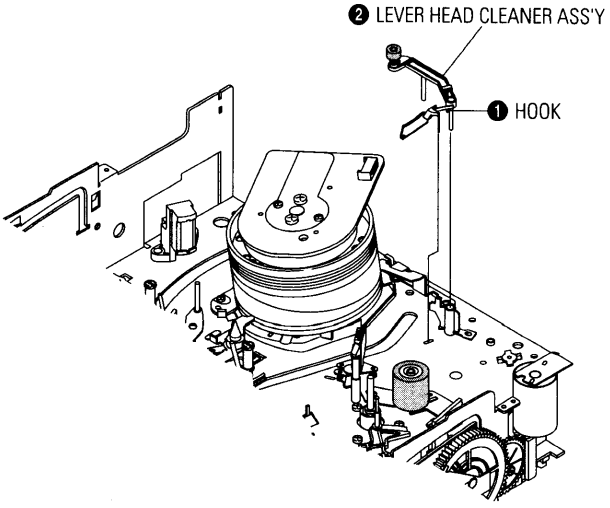


Fig. 4-35 Lever Head Cleaner Ass'y Removal

4-3-28 Motor Capstan Ass'y Removal

1) Remove the 3 Screws ❶.
2) Remove the Motor Capstan Ass'y ❷.

Assembly :

1) Match the 3 holes of Motor Capstan Ass'y ❷ to the 3 holes of Main Base as attending not to drop or knock the Motor Capstan Ass'y.
2) Tighten the 3 Screws in the direction of arrow as shown detail drawing.

Note :

1) Don't reuse the removed screws from Motor Capstan Ass'y.
2) After tightening screws, check if there is gap between the head of screws and the top side of Main Base. There should have no gap between the head of screws and the top side of Main Base.
3) After reinstalling, adjusting the tape transport system again.

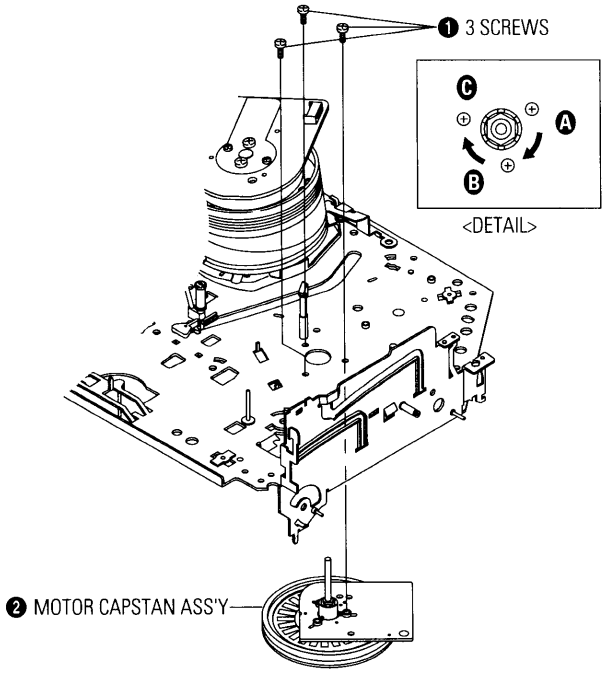


Fig. 4-36 Motor Capstan Ass'y Removal

4-3-29 How to Eject the Cassette Tape (If the unit does not operate on condition that is inserted into housing ass'y)

1) Remove the Holder worm ❶ and the Gear Worm ❷.
2) Turn the Gear Worm Wheel ❸ counterclockwise with screw driver. (Refer to arrow)

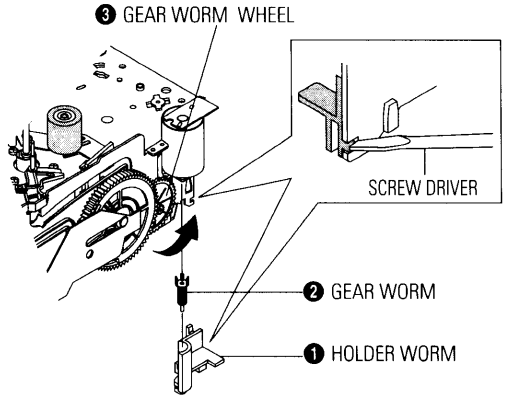


Fig. 4-37

3) When Slider S, T are approached in the position of unloading, rotate holder Clutch counterclockwise after inserting screw driver in the hole of frame's bottom in order to wind the unwounded tape. (Refer to Fig. 4-38)
(If you rotate Gear Worm Wheel continuously when tape is in state of unwinding, you may cause a tape contamination by grease and tape damage. Be sure to wind the unwounded tape in the state of set horizontally.)
4) Rotate Gear Worm Wheel ❸ counterclockwise using screw driver again up to the state of eject mode and then pick out the tape. (Refer to Fig. 4-36)

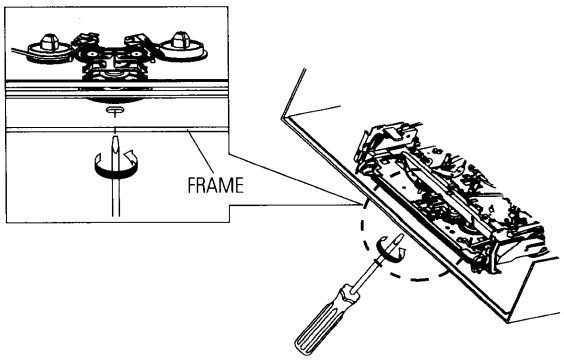


Fig. 4-38

4-4 The table of clearing, Lubrication and replacement time about principal parts

1) The replacement time of parts is not life of parts.
2) The table 4-1 is that the VCR Set is in normal condition (normal temperature, normal humidity).
   The checking period may be changed owing to the condition of use, runtime and environmental conditions.
3) Life of the Cylinder Ass'y is depend on the condition of use.
4) See exploded view for location of each parts.

<Table 4-1>

*	Parts Name	Checking Period										Remark
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
TAPE PATH SYSTEM	POST TENSION	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	- To clean the parts, use patch and alcohol (solvent). - After cleaning, use the video tape after alcohol is gone away completely. - We recommend to use oil [EP-56] or solvent. - One or two drops of oil should be applied after cleaning with alcohol.
	SLANT POST S, T	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#8 GUIDE SHAFT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	CAPSTAN SHAFT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#9 GUIDE POST	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#3 GUIDE POST	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	GUIDE ROLLER S, T	Δ	Δ	Δ	O	O	O	O	O	O	O	
	CYLINDER ASS'Y	Δ	O	O	O	O	O	O	O	O	O	
	FE HEAD	Δ	Δ	Δ	O	O	O	O	O	O	O	
	ACE HEAD	Δ	O	O	O	O	O	O	O	O	O	
	PINCH ROLLER	Δ	O	O	O	O	O	O	O	O	O	
	POST REEL S, T		◆		◆		◆		◆		◆	- Periodic time of applying oil (Apply oil after cleaning) - The excessive applying oil may be the cause of malfunction.
	SLEEVE TENSION		◆		◆		◆		◆		◆	
	POST CENTER		◆		◆		◆		◆		◆	
	LEVER IDLE BOSS (2Point)		◆		◆		◆		◆		◆	
DRIVING SYSTEM	CAPSTAN MOTOR PULLEY	Δ	Δ	Δ	Δ	Δ	O	O	O	O	O	
	BELT PULLEY				O	O	O	O	O	O	O	
	HOLDER CLUTCH ASS'Y	Δ	O	O	O	O	O	O	O	O	O	
	GEAR CENTER ASS'Y		O	O	O	O	O	O	O	O	O	
	GEAR IDLE (2Point)		O	O	O	O	O	O	O	O	O	
	LOADING MOTOR		O	O	O	O	O	O	O	O	O	
BRAKE SYSTEM	BAND BRAKE ASS'Y		O	O	O	O	O	O	O	O	O	
	BRAKE T ASS'Y		O	O	O	O	O	O	O	O	O	

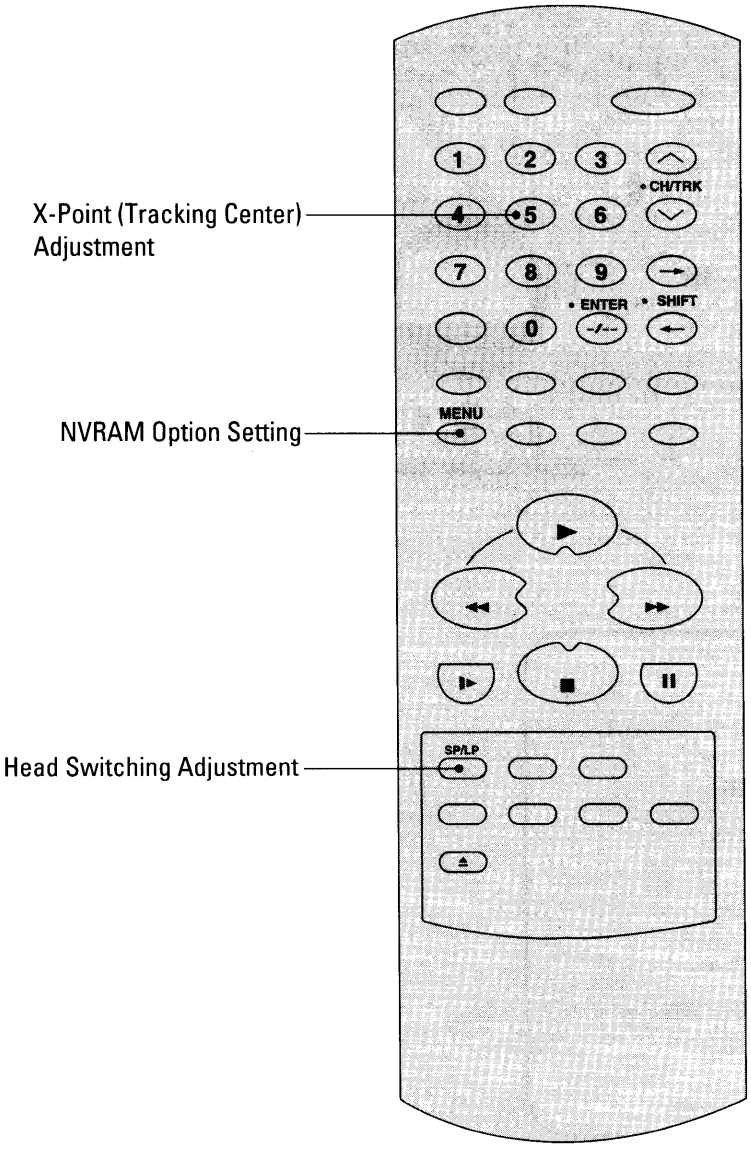
Δ : Cleaning O : Check and replacement in necessary ◆ : Add Oil

5. Alignment and Adjustment

5-1 Reference

1) X-Point (Tracking center) adjustment, "Head switching adjustment" and "NVRAM option setting" can be adjusted with remote control.
2) When replacing the Micom (IC601) and NVRAM (IC605 ; EEPROM) be sure to adjust the "Head switching adjustment" and "NVRAM option setting".
3) When replacing the cylinder ass'y, be sure to adjust the "X-Point" and "Head switching adjustment".
4) Remote control used for same chassis as a accessory is available for all adjustments.
5) How to adjustment.
   - Press the "SW701 (TEST)" button on Main PCB to set the adjustment mode.
   - If the corresponding adjustment button is pressed, the adjustment is performed automatically.
   - If the adjustment is completed, be sure to turn the power off.

5-1-1 Location of adjustment button of remote control



<This remote control is using the for V-729B.>

Fig. 5-1

5-1-2 SW701 (TEST) location for adjustment mode setting

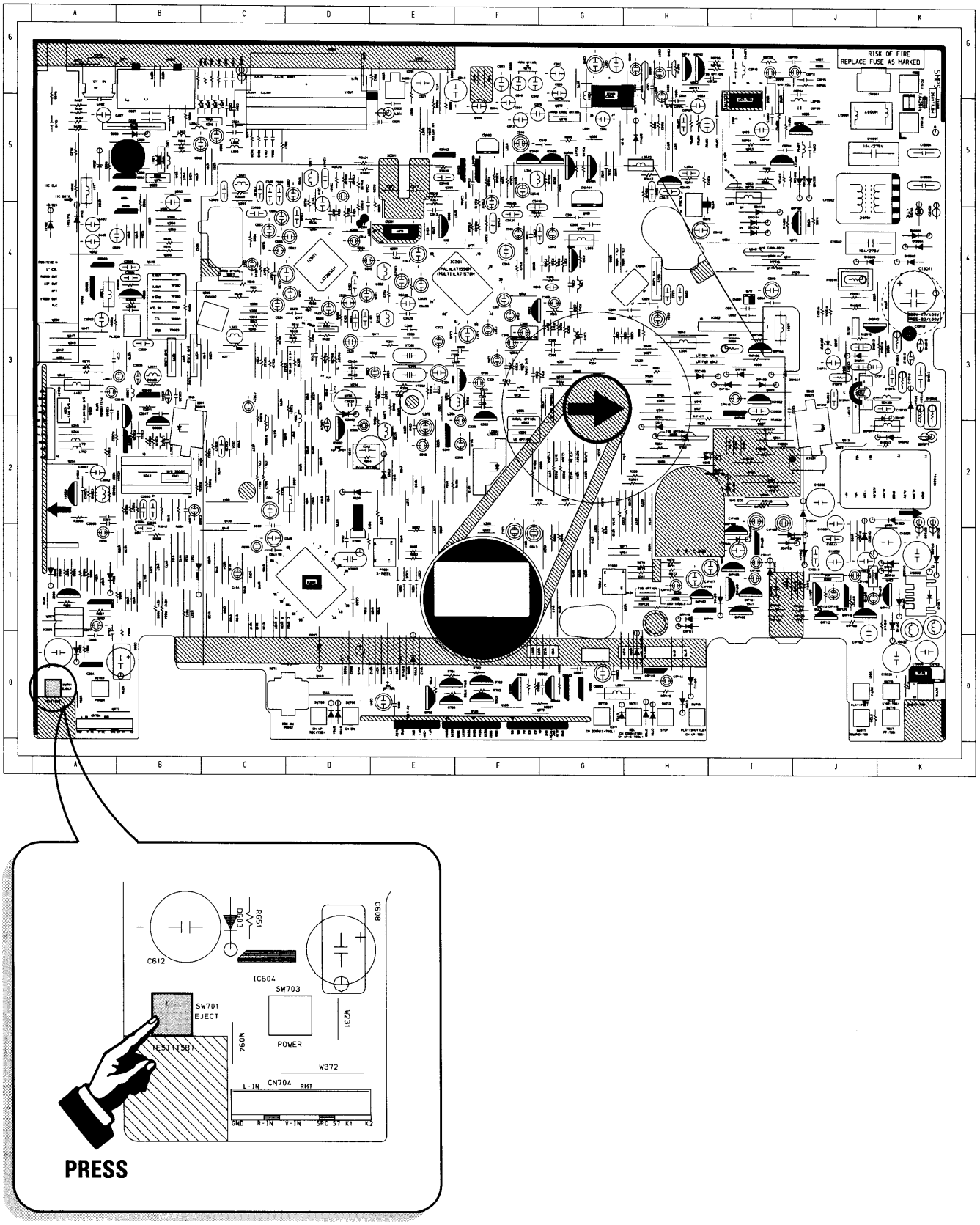


Fig. 5-2 Main PCB (Top View)

5-2 Mechanical Adjustment

5-2-1 Tape Transport System and Adjustment Locations

The tape transport system has been adjusted precisely in the factory. Alignment is not necessary except for the following :
1) Noise observed on the screen.
2) Tape damage.
3) Parts replacement in the tape transport system.

Lower flange height of tape guide is used as the reference for the transport adjustment.
To maintain the height of the tape guide and prevent damage, do not apply excessive force onto the main base.

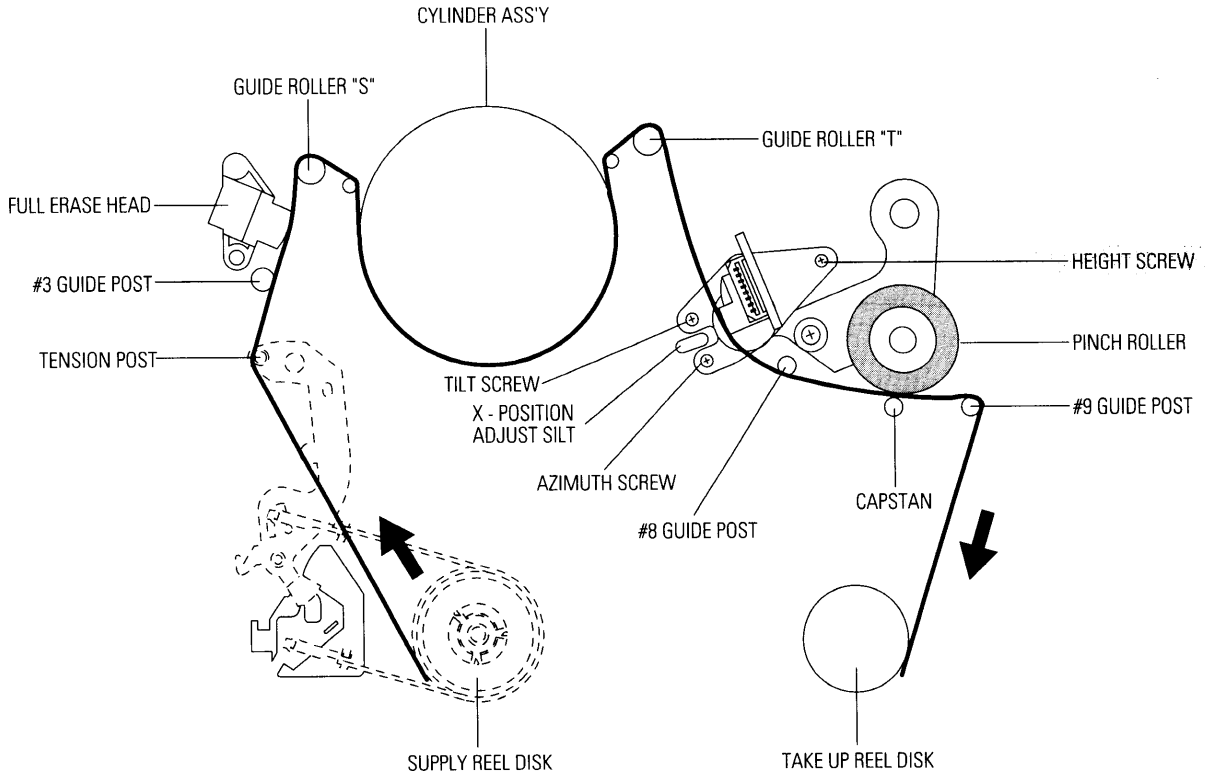


Fig. 5-3 Location of Tape Transport Adjustment

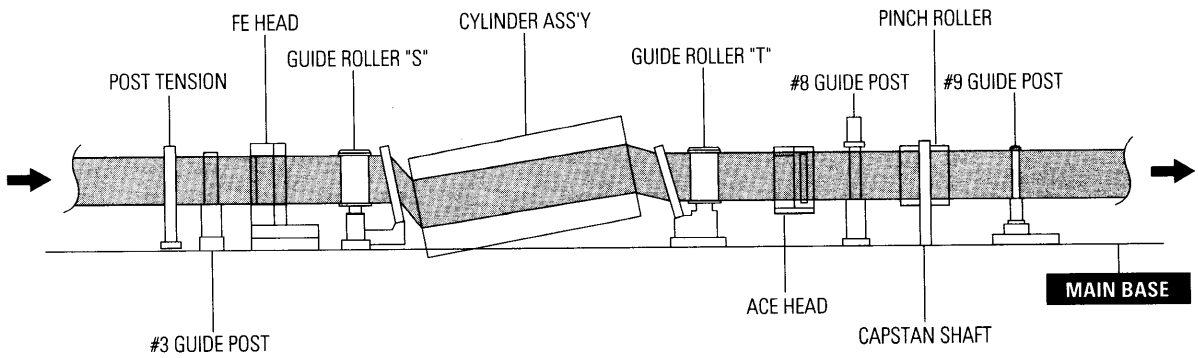


Fig. 5-4 Tape Travel Diagram

5-2-2 Tape Transport System Adjustment

When parts are replaced, perform the required adjustments by referring to procedures for the tape transport system. If there are any changes to the tape path, first run a E-120 tape and make sure excessive tape wrinkle does not occur at the tape guides.

1) If tape wrinkle is observed at the guide roller S, T, turn the guide roller S, T until wrinkle disappears.
2) If the tape wrinkle is still observed at the tape guide, perform the tilt adjustment of the ACE head.

(1) ACE Head Assembly Adjustment

Test point :	TP601 (H'D S/W -Trigger)
	TP602 (Control Pulse)
	TP301 (Video output)
	TP302 (Audio output)
	TP303 (Envelope)
Test tape :	ST-N1
	BLANK TAPE : E-180

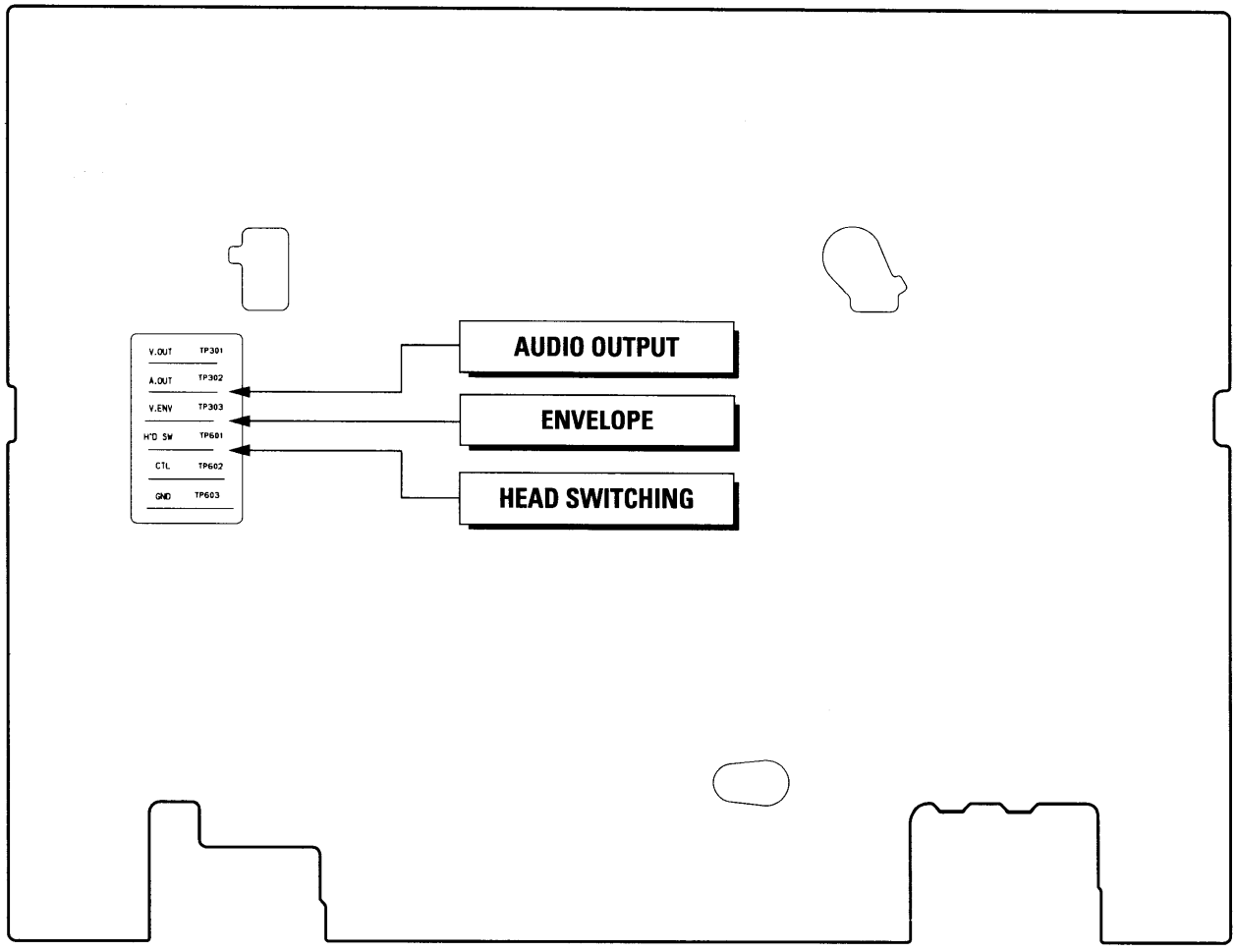


Fig. 5-5 Location of Test point (Main PCB-Top View)

a. ACE HEAD HEIGHT ADJUSTMENT

1) Run the alignment tape (Color bar) in the playback mode.
2) Observe surface of the audio head using a dental mirror.
3) Turn screw (C) clockwise or counterclockwise until the gap of lower tape edge and the lower edge of the control head is about 0.25mm.
(Refer to Fig. 5-6 and 5-7)

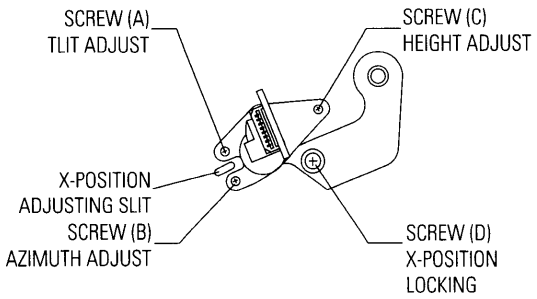


Fig. 5-6 Location of ACE Head Adjustment Screw

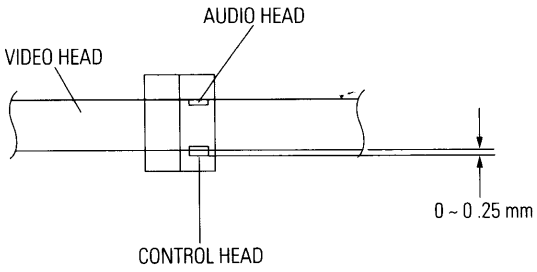


Fig. 5-7 ACE Head Height Adjustment

b. ACE HEAD TILT ADJUSTMENT

1) Playback a blank tape and observe the position of the tape at the lower flange of tape guide.
2) Confirm that there is no curl or wrinkle at the lower flange of tape guide as shown in Fig. 5-8 (B).
3) If a curl or wrinkle of the tape occurs, slightly turn the screw (A) tilt adjust on the ACE head ass'y.
4) Reconfirm the ACE head height.

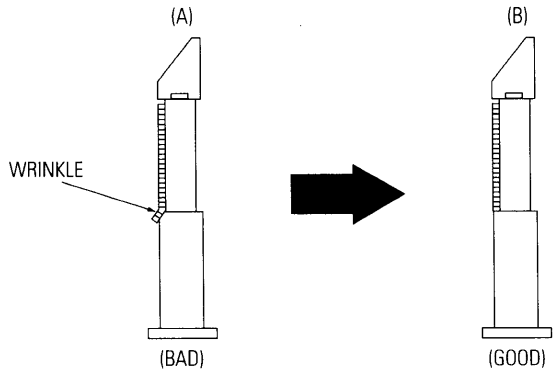


Fig. 5-8 Tape Guide Check

c. AUDIO AZIMUTH ADJUSTMENT

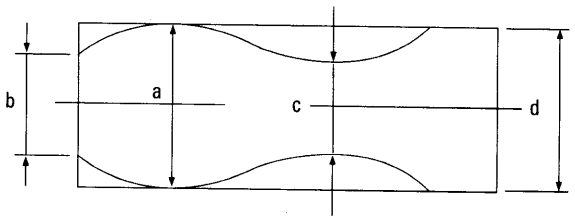
1) Load alignment tape (Mono scope) and playback the NTSC : 7KHz (PAL : 6KHz) signal.
2) Connect channel-1 scope probe to audio output test point (TP302).
3) Adjust screw (B) to achieve maximum audio level. (See Fig. 5-6)

d. ACE HEAD POSITION (X-POINT) ADJUSTMENT

1) Playback the alignment tape (Color bar).
2) Press the "SW701 (TEST)" button on Main PCB to set the adjustment mode. (See Fig. 5-2)
3) Press the "5" button of remote control then adjustment is operated automatically. (See Fig. 5-1)
4) Connect the CH-1 probe to TP303 (Envelope) the CH-2 probe to TP601 (H'D switching pulse) and then trigger to CH-1.
5) Insert the (-) driver into the X-Point adjustment hole and adjust it so that envelope waveform is maximum.
6) Turn the Power off.

(2) Linearity adjustment (Guide roller S, T adjustment)

1) Playback the Mono Scope alignment tape (SP mode).
2) Observe the video envelope signal on an oscilloscope (triggered by the video switching pulse).
3) Make sure the video envelope waveform (at its minimum) meets the specification shown in Fig. 5-9.
   If it does not, adjust as follows :



a b c d
c,b,d/a ≧ 63%

Fig. 5-9 Envelope Waveform Adjustment

Note :
a=Maximum output of the video RF envelope.
b=Minimum output of the video RF envelope at the entrance side.
c=Minimum output of the video RF envelope at the center point.
d=Maximum output of the video RF envelope at the exit side.

4) If the section A in Fig. 5-10 does not meet the specification, adjust the guide roller S up or down.
5) If the section B in Fig. 5-10 does not meet the specification, adjust the guide roller T up or down.

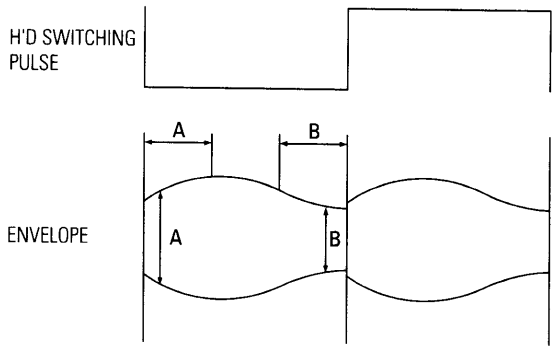


Fig. 5-10 Adjustment Points

6) Play back the Mono Scope alignment tape (SP mode).
7) Connect an oscilloscope CH-1 to the Envelope and CH-2 to the H'D SW Pulse for triggering.
8) Turn the guide roller heads with a flat head (▬) driver to obtain a flat video RF envelope as shown in Fig. 5-11.

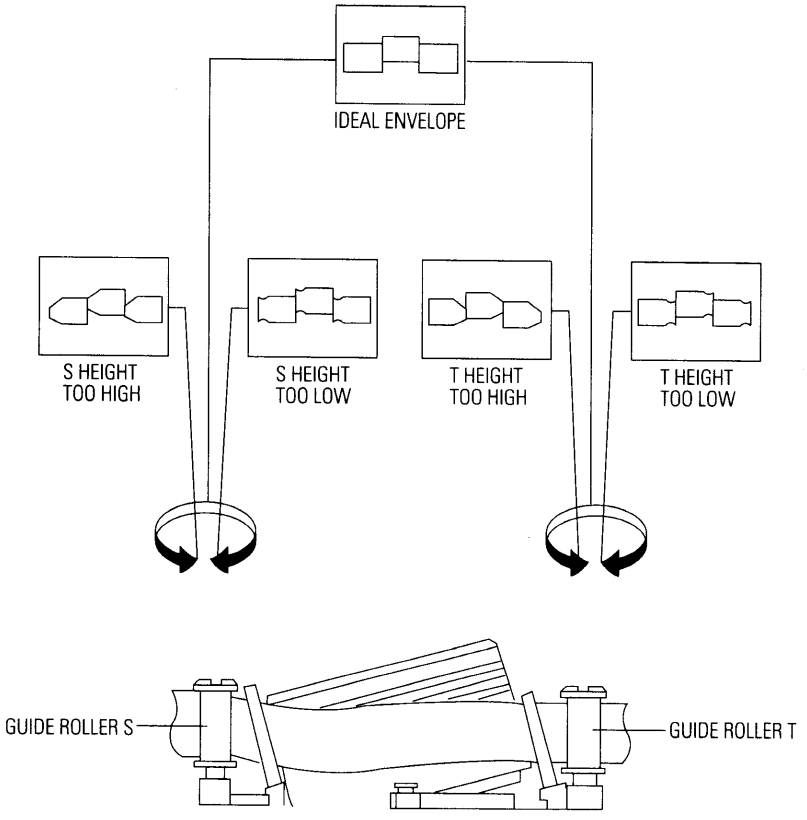


Fig. 5-11 Guide Roller S, T Height Adjustment

(3) Check Transitional Operation from RPS to Play

Check transition from RPS mode to play mode :
Using a pre-recorded SP tape, make sure the entry side of envelope comes to an appropriate steady state within 3 seconds (as shown in Fig. 5-12).
If the envelope waveform does not reach specified peak-to peak amplitude within 3 seconds, adjust as follows :

1) Make sure there is no gap between the supply roller lower flange and the tape.
   If there is a gap, adjust the supply guide roller again.
2) Change operation mode from the RPS to the play mode (again) and make sure the entry side of envelope rises within 3 second.

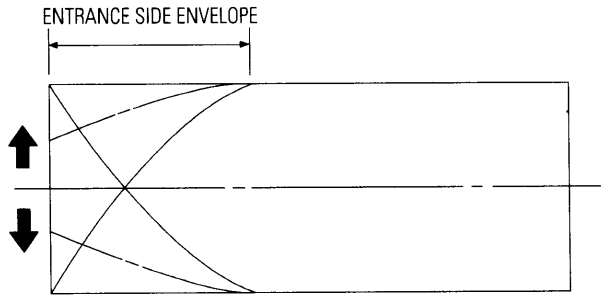


Fig. 5-12 Video Envelope Rising when Operation mode Changes from RPS to Play Mode

(4) Envelope Check

1) Make recordings on T-120 (E-120) and T-160 (E-180) tape.
   Make sure the playback output envelope meets the specification as shown in Fig. 5-13.
2) Play back a self recorded tape (recording made on the unit using with T-120 (E-120).
   The video envelope should meet the specification as shown in Fig. 5-13.
   In SP mode, (A) should equal (B).
   If the head gap is wide, upper cylinder should be checked.

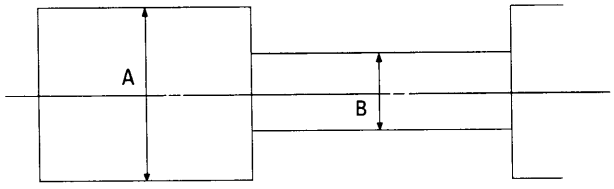


Fig. 5-13 Envelope Output and Output Level

(5) Tape Wrinkle Check

1) Run the T-160 (E-180) tape in the playback, FPS, RPS and Pause modes and observe tape wrinkle at each guide.
2) If excessive tape wrinkle is observed, perform the following adjustments in Playback mode :

- Tape wrinkle at the guide roller S, T section : Linearity adjustment.
- Tape wrinkle at tape guide flange : ACE head assembly coarse adjustment.

5-2-3 Reel Torque

1) The rotation of the capstan motor causes the holder clutch ass'y to rotate through the belt pulley.
2) The spring wrap PLAY/REV of holder clutch ass'y drives the disk reel S, T through gear idle by rotation of gear center ass'y.
3) Brake is operated by slider cam at FF/REW mode.
4) Transportation of accurate driving force is done by gears. (Gear Center Ass'y)

Note : If the spec. does not meet the followings specifications, replace the holder clutch ass'y and then recheck.

<Table 5-1>

MODE	TORQUE g/cm		GAUGE
PB	NTSC	82.5 ± 27.5	Cassette Torquemeter
	PAL	79 ± 27	
RPS	145 ± 30		Cassette Torquemeter

5-2-4 Location adjustment and Confirmation of Tension Post

1) Remove the holder cassette ass'y and then push the lever FL Arm-R to the direction of loading.
2) Push the lever tension drive ❶ in the direction of arrow. (See Fig. 5-14)
3) Turn the gear worm wheel ❷ clockwise so that "Timing Point" of the slider FL drive ❸ and gear FL cam ❹ can be aligned (See Fig. 5-15)

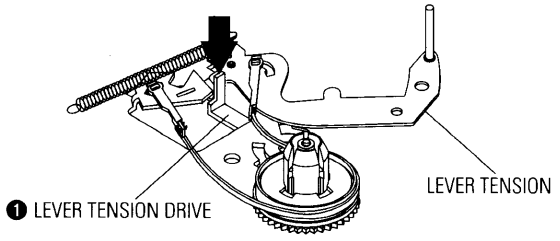


Fig. 5-14

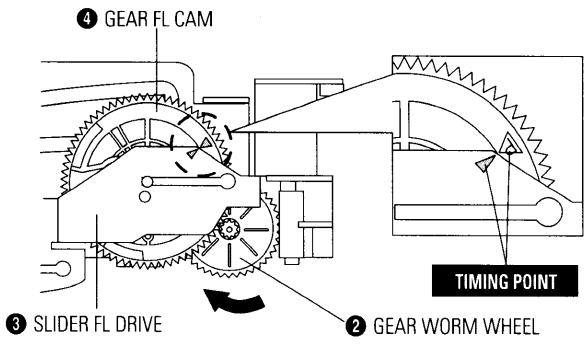


Fig. 5-15

4) As rotating Disk S Reel ❶ clockwise and the region of adjusting in the Main Base (in shape of slit) clockwise or counterclockwise after inserting screw driver in the slit on Main Base. Adjust the left end edge of Lever Tension Ass'y ❸ to 1.3 +1.5/-0.5mm from the location of mark in the Main Base.
5) As rotating Disk S Reel ❶, double-check the location of the left end edge of Lever Tension Ass'y and the quantity of crossing from mark on Main Base. (+1.0/-0.5mm)

Counterclockwise : Torque UP
Clockwise : Torque DOWN

Back Tension should be 56 ± 15g.cm at inspecting it with Back Tension Meter.

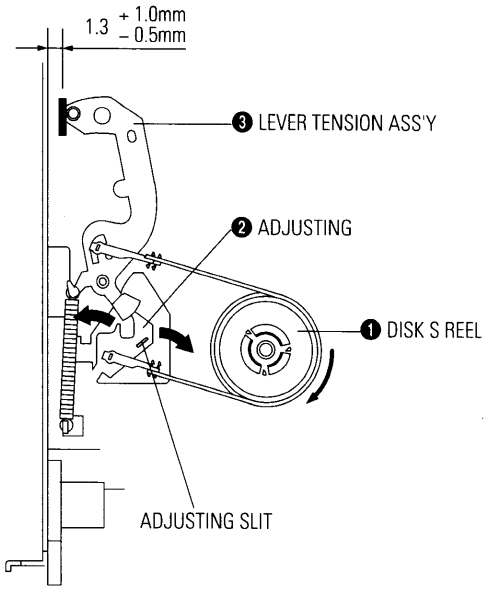


Fig. 5-16 Tension Pole and Back Tension Adjustment

Note :
1) Mark on Main Base is located in about 1.3mm from inside of bending line.
2) Be careful not to deform the region of adjusting on Main Base up and down at adjusting.

5-3 Head Switching Point Adjustment

1) Playback the alignment tape.
2) Press the "SW701 (TEST)" button on Main PCB to set the adjustment mode. (See Fig. 5-2)
3) Press the "SP/SLP" button of remote control then adjustment is operated automatically. (See Fig. 5-1)
4) Turn the Power off.

5-4 NVRAM Option Setting

1) NVRAM Option is adjusted at production line basically.
2) In case Micom (IC601) and NVRAM (IC605 ; EEPROM) is replaced, be sure to set the corresponding option number of the repaired model. (If the option is not set, the unit is not operated.)

1) Press the "SW701 (TEST)" button on Main PCB to set the adjustment mode. (See Fig. 5-2)
2) Press the "MENU (OSP)" button on the remote control about 5 seconds then option setting display is appeared. (See Fig. 5-17)
3) Select the option number (See Table 5-2) of corresponding model with "SHIFT ⊕⊖ " button on the remote control.
4) If selecting the option number is completed, press the "CH/TRK (PROG.TV) ⊙ " button of remote control. (If "CH/TRK (PROG.TV) ⊙ " button is pressed, the selected number is changes reversed color. ; See Fig. 5-17)
5) Press the "ENTER (ENTRER)" button of remote control again to store the option number. ("SAVE" is displayed for a second as shown Fig. 5-18 and this setting is completed.)
6) Turn the Power off.

<Table 5-2>

MODELS	OPTION NUMBER
V-729B	3, 4, 6, 7, 8, 12, 13, 15, 21, 22, 23, 24, 33, 36, 37, 44, 48
V-709B	3, 6, 7, 8, 12, 13, 15, 21, 22, 23, 24, 34, 36, 44, 48
V-429B	3, 4, 6, 7, 8, 12, 22, 24, 33, 37, 48
V-229B	3, 4, 6, 7, 8, 22, 24, 33, 37, 48
V-219B	3, 4, 6, 7, 8, 22, 24, 33, 37, 48
V-209UK	3, 8, 22, 23, 24, 34, 48
V-729EG	2, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 18, 21, 22, 23, 24, 26, 30, 33, 36, 37, 44, 48
V-719EG	2, 5, 7, 8, 10, 12, 13, 14, 15, 16, 18, 21, 22, 23, 24, 26, 30, 34, 36, 44, 48
V-429EG	2, 4, 5, 7, 8, 10, 12, 13, 16, 18, 22, 24, 26, 30, 33, 37, 48
V-229EG	2, 5, 7, 8, 10, 16, 18, 21, 22, 24, 26, 30, 34, 48
V-219EG	2, 5, 7, 8, 10, 16, 18, 22, 24, 26, 30, 34, 48
V-209EG	5, 7, 8, 10, 16, 18, 22, 23, 24, 26, 30, 34, 48
V-729F	2, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 18, 19, 21, 22, 23, 24, 25, 29, 33, 36, 37, 44, 48
V-609F	2, 5, 8, 9, 12, 13, 14, 15, 18, 19, 21, 22, 23, 25, 29, 34, 36, 44, 48
V-429F	2, 5, 6, 7, 8, 9, 12, 16, 18, 19, 22, 24, 25, 29, 33, 37, 48
V-419F	2, 5, 8, 9, 12, 18, 19, 22, 25, 29, 34, 48
V-229F	2, 5, 6, 7, 9, 16, 18, 19, 22, 24, 25, 29, 33, 37, 48
V-219F	2, 5, 9, 18, 19, 22, 25, 29, 34, 48
V-729W	5, 8, 10, 12, 13, 14, 15, 18, 21, 22, 23, 26, 29, 30, 34, 36, 44, 48
V-429W	5, 8, 10, 12, 18, 22, 26, 29, 30, 34, 48
V-209W	8, 10, 18, 22, 26, 29, 30, 34, 48

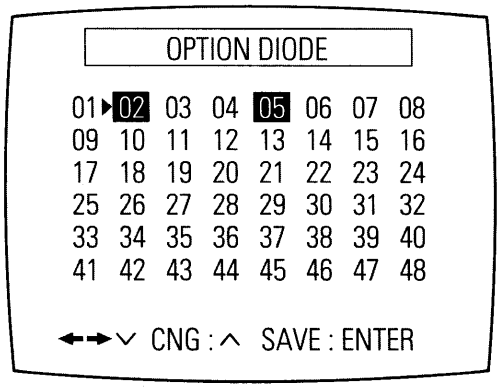


Fig. 5-17

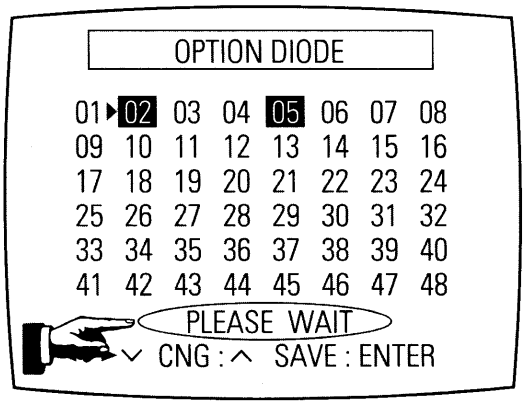


Fig. 5-18

6. Exploded View

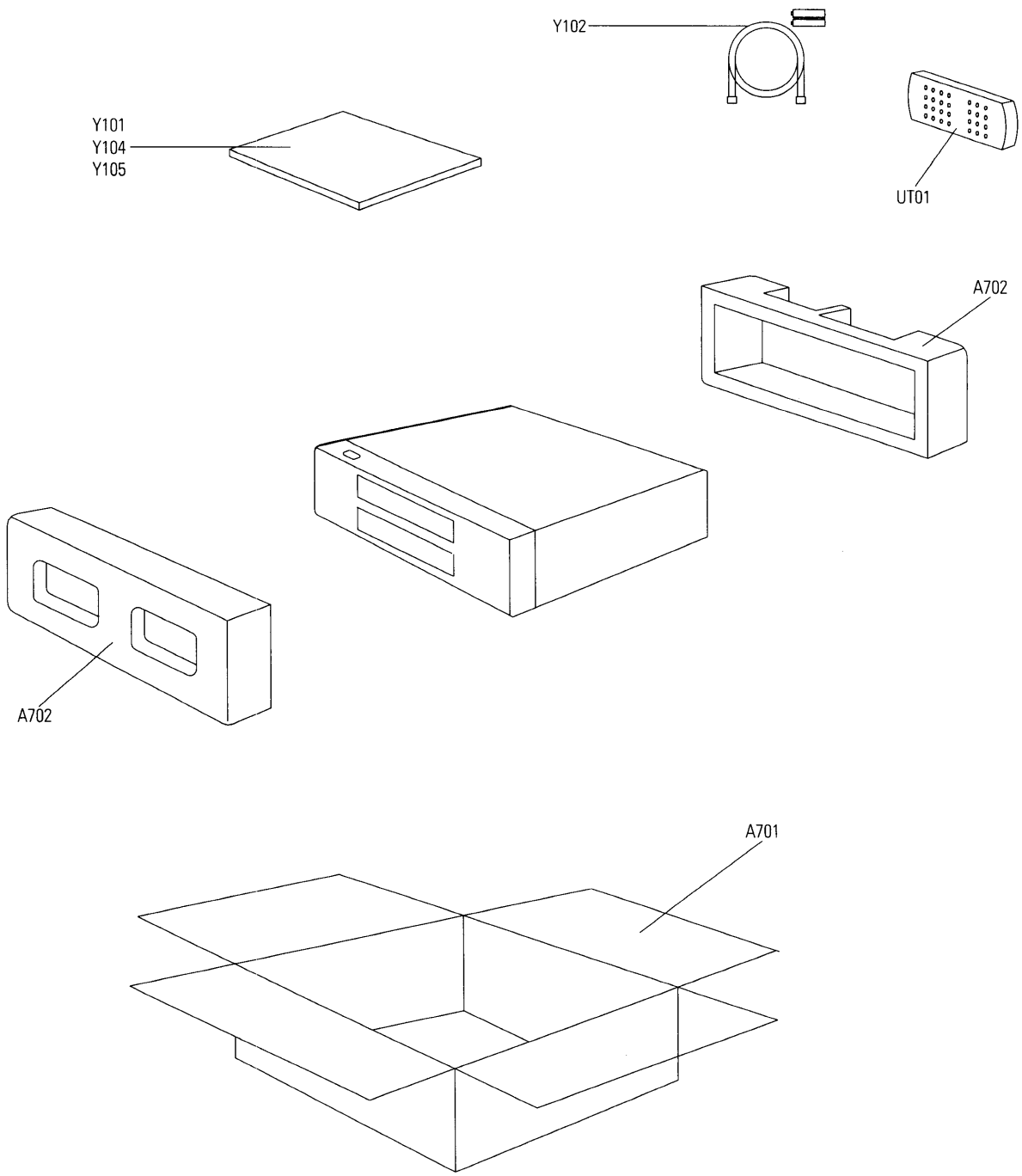
6-1 Packing Assembly ---------- 6-2

6-2 Instrument Assembly ---------- 6-3

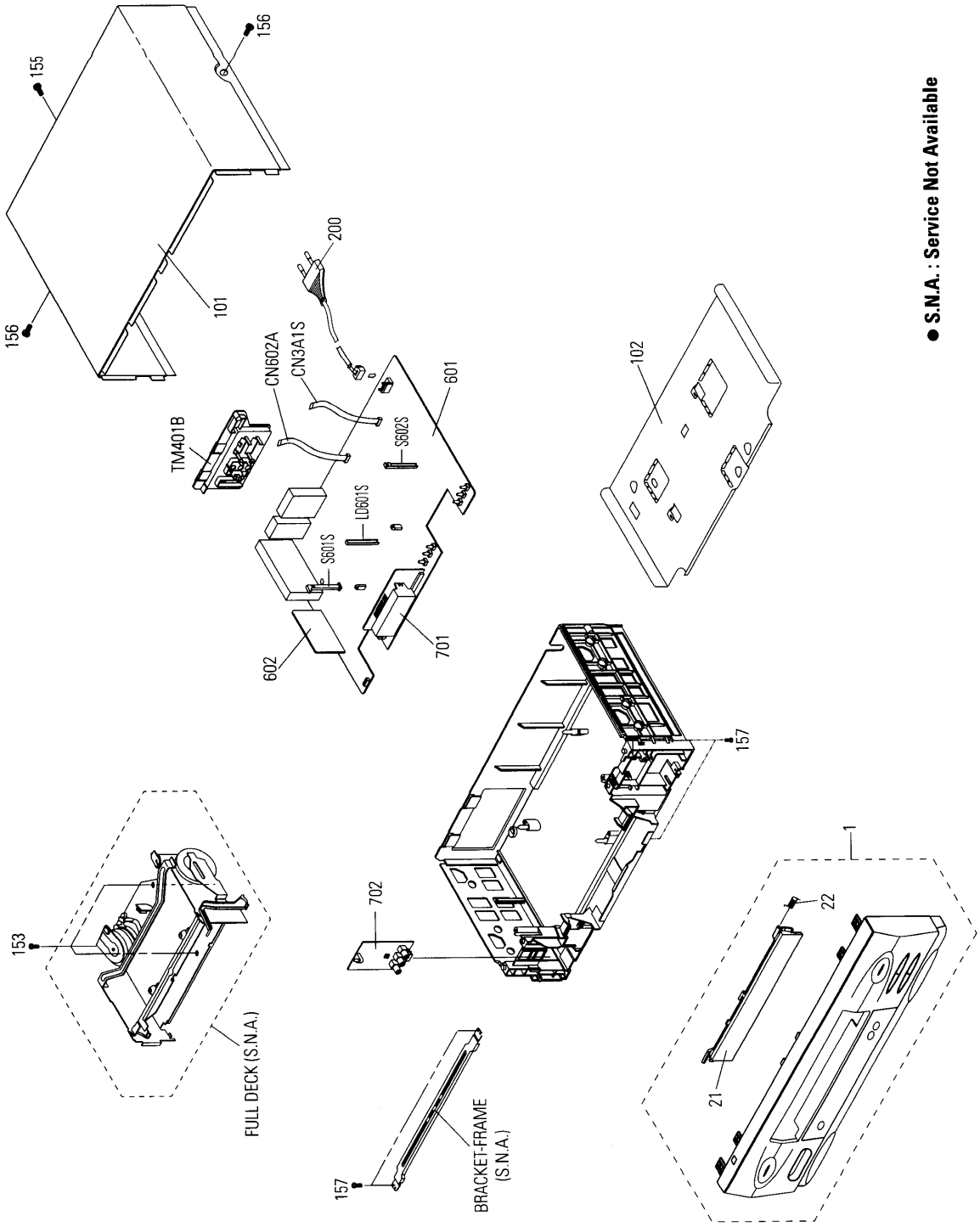
6-3 Mechanical Parts (Top Side) ---------- 6-4

6-4 Mechanical Parts (Bottom Side) ---------- 6-5

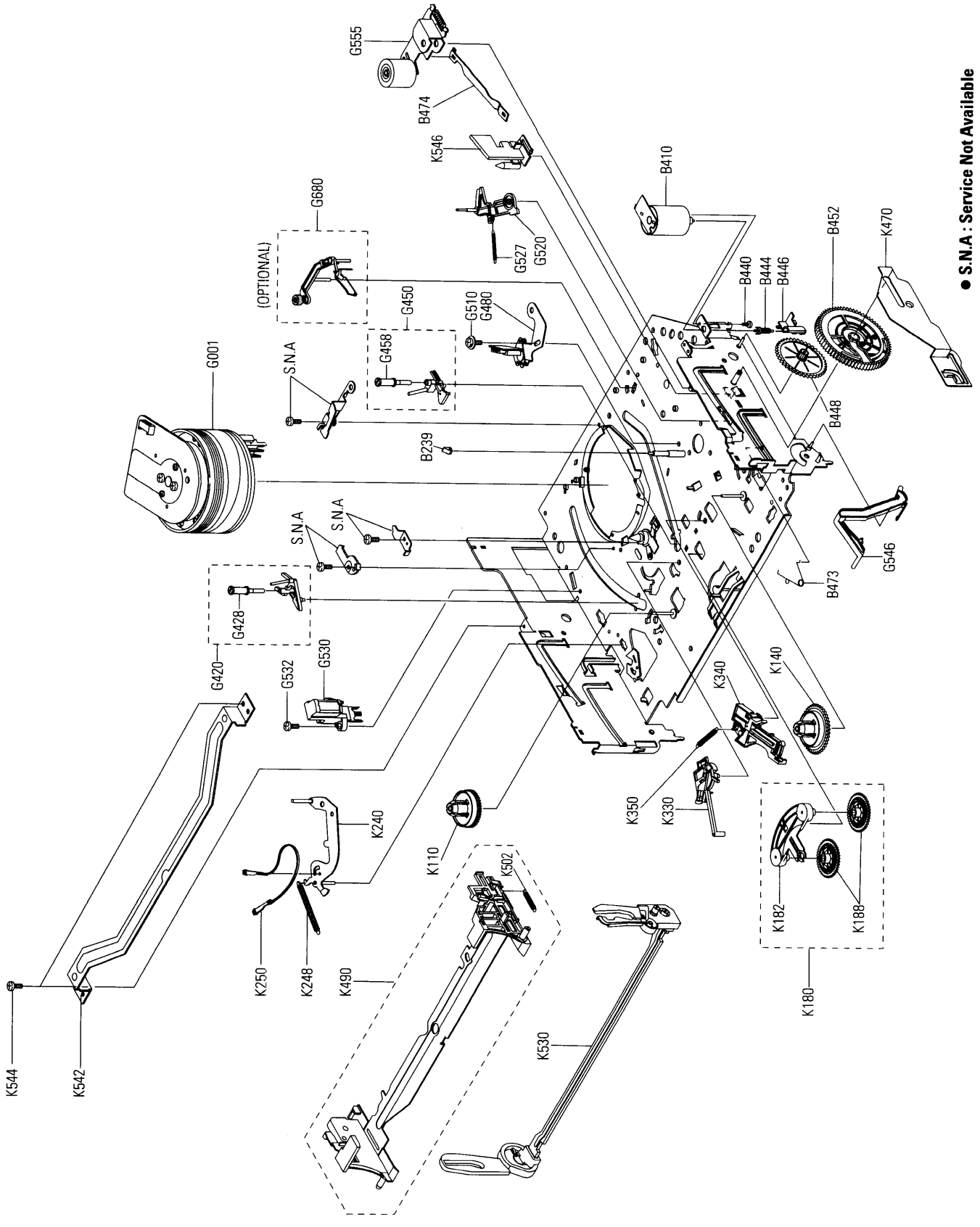
6-1 Packing Assembly



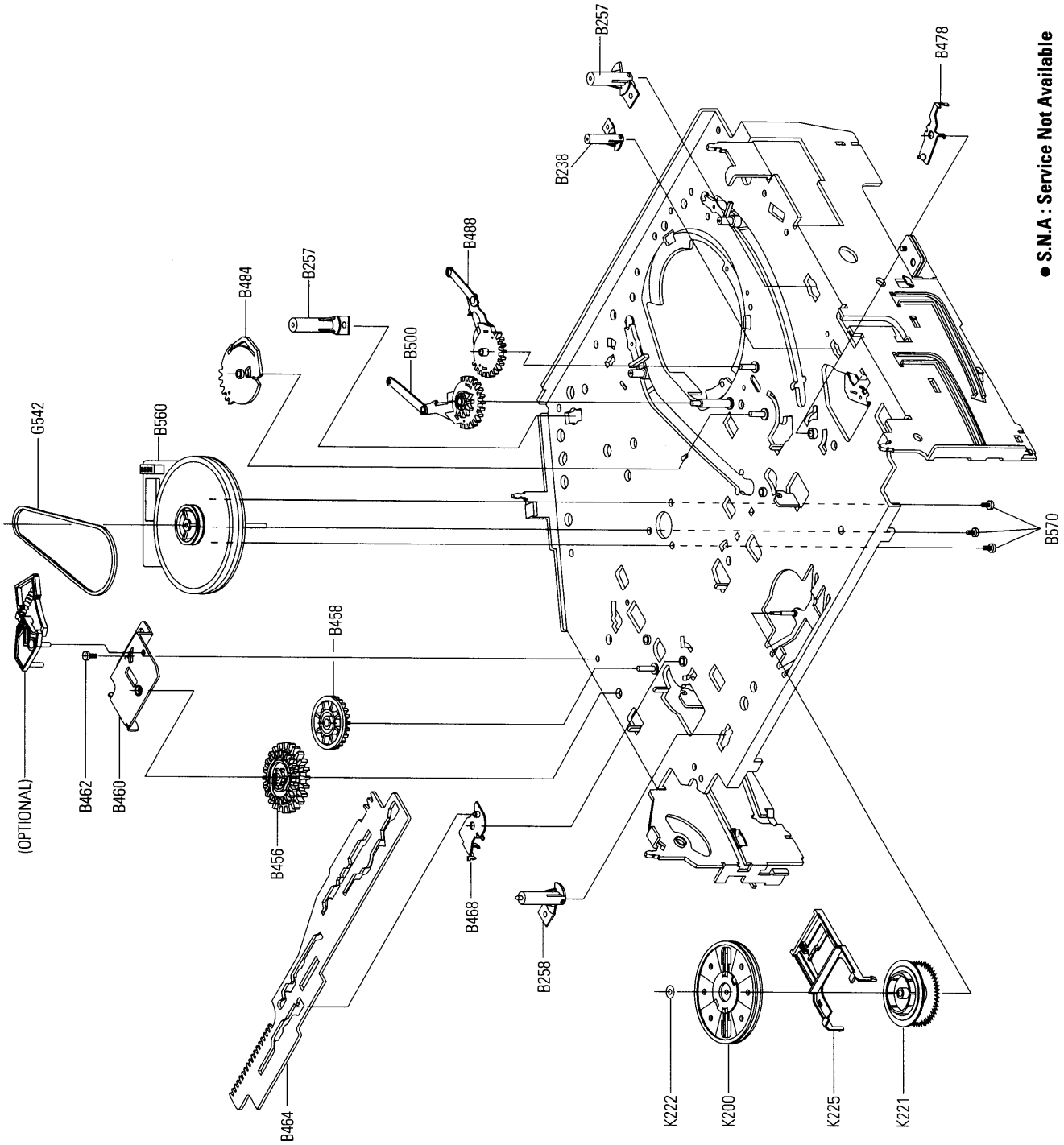
6-2 Instrument Assembly



6-3 Mechanical Parts (Top Side)



6-4 Mechanical Parts (Bottom Side)



7. Replacement Parts List

N O T E : This parts listed on the basic model V-729B, V-709B.
The different parts for other models are listed on the differential list.

V-729B

-PACKING PARTS-

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
A701	BY634209	AC69-50913W	AC69-50913W	PACKING CASE;V-729B,-,-,428,-	
A702	BY730125	AC69-00030A	AC69-00030A	CUSHION-F/B;V-729B,EPS,-,-,-,-,-	
UT01	BY634128	AC59-00005A	AC59-00005A	REMOCON-ASSY;-,TOSHIBA,-,45KEY,V-729B,-	
Y101	BY634152	AC68-00156A	AC68-00156A	MANUAL-USERS;V-729B,MOJO100,-, ,ENG,-	
Y102	BY634127	AC39-42001L	AC39-42001L	CABLE-RF ASSY;PAL,-,1.2M,-,-,-,-	

-INSTRUMENT PARTS-

1	BY730403	AC97-00122A	AC97-00122A	ASSY-PANEL FRONT;V-729B/TSB,HIPS94HB,SIL
21	BY730330	AC64-52175C	AC64-52175C	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V
22	BY730093	AC61-62032A	AC61-62032A	SPRING-MASK;X-9,-,SUS,-,4.4,-,SV-C130
101	BY730313	AC64-30899C	AC64-30899C	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380
102	BY730280	AC63-32128A	AC63-32128A	COVER-BOTTOM;SV-C140F,SECC,387.7X197.6,T
153	70790218	AC60-12126A	67158-240-121	SCREW-BH;-,BH,-,4*12,FE,FZY,-,-,-
155	70790082	AC60-12134A	67158-240-163	SCREW-TAP BH;-,BH,-,2-4X16,-,FE
156	BY730204	AC60-00001A	AC60-00001A	SCREW-MACHINE;-,BH,*,4X12,M4,L12,BLK,SMC
157	70790002	AC60-10063A	60504-0040-00	SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18
200	BY634126	AC39-12022K	AC39-12022K	POWER-CORD;Y352160,H03VVH2-F,-,BS6500,1.
CN3A1S	BY634118	3809-001111	3809-001111	CABLE-FLAT;30V,80C,130mm,7P,1.25mm,UL289
CN602A	BY634007	3809-001049	3809-001049	CABLE-FLAT;30V,80C,100MM,5P,1.25MM,UL289
LD601S	BY730082	AC61-21009A	AC61-21009A	HOLDER-LED;-,POM(M90-44),-,BLK,-,X-9
S601S	BY730080	AC61-21008A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9
S602S	BY730080	AC61-21008A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9
TM401B	BY730221	AC61-11061C	AC61-11061C	CONNECTOR BOARD-ASSY;V-629F/TSB,HIPS94,H

-MECHANICAL PARTS-

B238	BY730087	AC61-50660A	AC61-50660A	SLEEVE-TENSION;-,POM M90-44,-,-,ID3,-,-,
B239	BY730234	AC61-21004A	AC61-21004A	CAP-#8 GUIDE;-,POM M90-44,-,NTR,-,X-9
B257	BY730247	AC61-50661A	AC61-50661A	POST-MAIN PCB;-,POM M90-44,-,-,NTR,-,X-9
B258	BY730266	AC61-50684A	AC61-50684A	GUIDE-MAIN PCB;-,POM,OD7,L20,-,BLACK,X-9
B410	BY730066	AC31-12016A	AC31-12016A	MOTOR-LOADING ASSY;-,-,X-9
B440	BY730072	AC60-10515A	AC60-10515A	SCREW-MACHINE;-,PH,+,-,M3,L3,ZPC,-,YEL
B444	BY730104	AC66-20571A	AC66-20571A	GEAR-WORM;-,POM SW-01,0.5,2,-,4.5,X-9
B446	BY730079	AC61-21005A	AC61-21005A	HOLDER-WORM;-,POM M90-44,-,-,-,X-9
B448	BY730105	AC66-20573A	AC66-20573A	GEAR-WORM WHEEL;-,POM SW-01,0.6,11,-,6.6
B452	BY730107	AC66-20575A	AC66-20575A	GEAR-FL CAM;-,POM SW-01,M0.6,Z88,-,PCD58
B456	BY730108	AC66-20576A	AC66-20576A	GEAR-JOINT 1;-,POM SW-01,M1.0,Z22,-,PCD2
B458	BY730106	AC66-20574A	AC66-20574A	GEAR-JOINT 2;-,POM SW-01,M1.0,Z14,-,PCD1
B460	BY730215	AC61-11045A	AC61-11045A	BRACKET-GEAR;-,SECC20/20,-,T1.2,-,-,X-9
B462	BY730073	AC60-10517A	AC60-10517A	SCREW-TAP TITE;-,PH,+,-,M2.6,L5,ZPC,-,YE
B464	BY730381	AC66-80140A	AC66-80140A	SLIDER-CAM;-,SECC20/20,T1.2,-,-,X-9
B468	BY730366	AC66-30541A	AC66-30541A	LEVER-PINCH DR ASSY;-,-,-,-,-,X-9
B473	BY730090	AC61-60559A	AC61-60559A	SPRING-PINCH DRIVE;-,TS,SUS304,PI0.5,OD4
B474	BY730244	AC61-30180A	AC61-30180A	PLATE-JOINT;-,SECC20/20,T0.8,-,X-9
B478	BY730365	AC66-30540A	AC66-30540A	LEVER-TENS DR ASSY;-,-,-,-,-,X-9
B484	BY730110	AC66-20580A	AC66-20580A	GEAR-LOADING DRIVE;-,POM SW-01,M1.0,Z32,
B488	BY730117	AC66-30543A	AC66-30543A	LEVER-S LOAD ASSY;-,-,-,-,-,X-9
B500	BY730116	AC66-30542A	AC66-30542A	LEVER-T LOAD ASSY;-,-,-,-,-,X-9
B560	BY730201	AC31-00001A	AC31-00001A	MOTOR-CAPSTAN;-,F2QSB,-,-
B570	BY730071	AC60-10514A	AC60-10514A	SCREW-CAPSTAN;-,PH,+,M2.6,L6,-
G001	BY730386	AC96-10481L	AC96-10481L	ASSY-CYLINDER;CX-9,PAL 6HD
G420	BY730124	AC66-80142A	AC66-80142A	SLIDER-SUPPLY ASSY;-,X-9(TS),-,-,-,X-9
G428	BY730374	AC66-40153A	AC66-40153A	ROLLER-SUPPLY ASSY;-,VW-32,OD7,-,X-9
G450	BY730123	AC66-80141A	AC66-80141A	SLIDER-TAKE UP ASSY;-,X-9(TS),-,-,-,X-9
G458	BY730375	AC66-40154A	AC66-40154A	ROLLER-TAKE UP ASSY;-,VW-32,OD7,-,X-9
G480	BY730069	AC33-10217H	AC33-10217H	HEAD-ACE ASSY;-,-,-,-,X-9
G510	BY730074	AC60-10518A	AC60-10518A	SCREW-TAP TITE;-,PH,+,SW+ZW,M2.6,L5.6,ZP
G520	BY730115	AC66-30539A	AC66-30539A	LEVER-#9 GUIDE ASSY;-,X-9(TS),-,-,-,X-9
G527	BY730088	AC61-60553A	AC61-60553A	SPRING-#9 GUIDE;-,ES,SUS304-WPB,OD3.1,0.
G530	BY730068	AC33-10217G	AC33-10217G	HEAD-FE;VAA00000275,-,-,-,X-9
G532	BY730075	AC60-10519A	AC60-10519A	SCREW-TAP TITE;-,PH,+,-,M2.6,L8,ZPC
G542	BY730122	AC66-60051A	AC66-60051A	BELT-PULLEY;-,5CM-70,2 * 2,-,71.3,-,X-9
G546	BY730113	AC66-30535A	AC66-30535A	LEVER-FL DOOR;-,POM M90-44,-,-,BLK,X-9
G555	BY730070	AC59-90403A	AC59-90403A	UNIT-PINCH ASSY;X-9,-
G680	BY730372	AC66-30557A	AC66-30557A	LEVER-H/CLEANER ASSY;-,POM+URETHANE,-,-,
K110	BY730102	AC66-10267A	AC66-10267A	REEL-DISK S;-,POM M90-44,-,-,X-9

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
K140	BY730103	AC66-10268A	AC66-10268A	REEL-DISK T;-,POM M90-44,-,-,X-9	
K180	BY730369	AC66-30548A	AC66-30548A	LEVER-IDLER ASSY;-,POM+NYLON,-,-,-,X-9	
K182	BY730112	AC66-30524A	AC66-30524A	LEVER-IDLER;-,POM9044,-,-,-,-	
K188	BY730109	AC66-20577A	AC66-20577A	GEAR-IDLER;-,PEBAX 7033,-,-,-,-,X-9	
K200	BY730084	AC61-21012A	AC61-21012A	HOLDER-CLUTCH ASSY;-,-,-,-,-,-,X-9	
K221	BY730111	AC66-20581A	AC66-20581A	GEAR-CENTER ASSY;-,POM,M=0.5,-,HIGHT T.,	
K222	BY730076	AC60-30306A	AC60-30306A	WASHER-SLIT;-,-,ID2.1,OD5.0,T0.5,-,POLYS	
K225	BY730119	AC66-30547A	AC66-30547A	LEVER-UP DOWN ASSY;-,POM+SUS,-,-,-,X-9	
K240	BY730114	AC66-30538A	AC66-30538A	LEVER-TENSION ASSY;-,X-9(TS),-,-,-,X-9	
K248	BY730089	AC61-60554A	AC61-60554A	SPRING-TENSION LEVER;-,ES,SUS304-WPB,OD3	
K250	BY730094	AC63-12029A	AC63-12029A	BAND-BRAKE ASSY;-,X-9(TS),-,-,-,X-9	
K330	BY730121	AC66-30550A	AC66-30550A	LEVER-S.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K340	BY730120	AC66-30549A	AC66-30549A	LEVER-T.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K350	BY730092	AC61-60564A	AC61-60564A	SPRING-BRAKE;-,TENSION,SWP-A,0.25,3,-,X-	
K470	BY730380	AC66-80139A	AC66-80139A	SLIDER-FL DRIVE;-,SECC E20/20,T1.2,-,-,X	
K490	BY730236	AC61-21010B	AC61-21010B	HOLDER-CASS ASSY;-,SECC+POM+SUS,-,-,SEIN	
K502	BY730091	AC61-60561A	AC61-60561A	SPRING-FL.LEVER-LR;-,ES,SUS304 WPB,PI2.7	
K530	BY730118	AC66-30546A	AC66-30546A	LEVER-FL.ARM ASS'Y;-,SECC+POM+SUS,-,-,-,	
K542	BY730214	AC61-11044A	AC61-11044A	BRACKET-FL TOP;-,SECC E20/20,-,T1.0,-,-,	
K544	BY730073	AC60-10517A	AC60-10517A	SCREW-TAP TITE;-,PH,+,-,M2.6,L5,ZPC,-,YE	
K546	BY730086	AC61-50658A	AC61-50658A	GUIDE-CASS. DOOR;-,POM M90-44,-,-,NTR,-,	
-ELECTRICAL PARTS-					
601	BY630063	AC92-00031A	AC92-00031A	ASSY-PCB-MAIN;V-729B/TSB,2S,VFD,PDC	
602	BY630080	AC93-10860V	AC93-10860V	ASSY-SUB(F-NICAM);SV-627F/XEF,PAL COBRA	
701	BY630030	AC93-10866W	AC93-10866W	ASSY-F/TIMER;SV-627F,VFD-AVLINK	
702	BY630065	AC92-00033A	AC92-00033A	ASSY-OPT PCB-MAIN;CBC FRONT,TSB PAL COBR	
<INTEGRATED CIRCUITS>					
IC1SS1	BY530004	0604-001028	0604-001028	PHOTO-COUPLER;TR,50-600%,250mW,DIP-4,ST	⚠
IC1SS2	70795271	AC14-12006D	A4008-0757	IC;KA431Z,TO-92,TAPING	
IC301	BY631061	1204-001410	1204-001410	IC-VIDEO PROCESS;LA71590M,QFP,100P,-,PLA	
IC4N01	BY631063	1204-001516	1204-001516	IC-AUDIO PROCESSOR;MSP3417D,DIP,52P,551M	
IC501	BY631023	1204-001479	1204-001479	IC-AUDIO PROCESSOR;LA72634AM,QFP,64P,400	
IC601	BY631033	AC09-00024B	AC09-00024B	IC-MCU;UPD784927GF-119-3BA,100P,-,N90-11	
IC602	BY631022	1003-001162	1003-001162	IC-MOTOR DRIVER;KA3082,SIP,10PIN,25MIL,D	
IC604	70795269	AC14-12006C	AC14-12006C	IC;KA7533,DIP,-	
IC605	BY631058	1103-001101	1103-001101	IC-EEPROM;24C08,1028x8BIT,DIP,8P,300MIL,	
IC608	BY631059	1203-000515	1203-000515	IC-VOL. DETECTOR;7042,TO-92,3P,177MIL,PL	
IC6P01	BY631068	AC09-12014Z	AC09-12014Z	IC-MCU;LC74776M,30P,MFP,OSD/VPS/PDC I	
IC701	BY631031	AC09-00025A	AC09-00025A	IC-MCU;HD6473714H,64PINS,-,V-729B FLT MI	
<TRANSISTORS>					
PT601	BY530005	0604-001122	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
PT602	BY530005	0604-001122	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
Q1P101	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P102	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P103	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P104	70693410	0501-000610	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q1P105	70795137	0504-000116	62137-701-010	TR-DIGITAL;KSR1001,NPN,300mW,4.7K-4.7K,T	
Q1P106	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P107	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P109	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q1P110	70693238	0504-000118	62137-701-012	TR-DIGITAL;KSR1003,NPN,300mW,22K-22K,TO-	
Q1P111	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q1P112	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P114	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P115	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q1P116	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q1P117	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1SR01	BY631060	1203-001049	1203-001049	IC-PWM CONTROLLER:1L0380,TO-220F,4P,10MI	
Q302	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q303	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q304	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q308	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q309	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q310	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q3A01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3A03	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3A04	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3A05	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3A06	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3D01	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3D02	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3D03	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q602	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q6B01	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q6B02	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q6B03	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
Q6B04	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q6P01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q6P02	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q6P03	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q701	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q802	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q803	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q804	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
S601	BY530003	0603-001011	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
S602	BY530003	0603-001011	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
<DIODES>					
D1P101	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P103	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P104	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P105	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P108	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P109	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P110	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P111	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P113	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P115	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P117	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P118	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P119	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1SD31	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SD32	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS01	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS02	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS03	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS04	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS11	BY430008	0402-000276	0402-000276	DIODE-RECTIFIER;UF4007,1KV,1A,DO-41,TP	
D1SS12	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS31	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS32	BY430010	0402-001194	0402-001194	DIODE-RECTIFIER;UG2D,200V,2A,DO-204AC,TP	
D1SS33	BY430065	0404-001069	0404-001069	DIODE-SCHOTTKY;B10A45VI,45V,10A,TO-220IS	
D1SS44	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D302	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D401	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D4N01	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D603	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D604	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D605	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D611	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D620	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D701	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D702	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D702	BY430014	0403-001141	0403-001141	DIODE-ZENER;MTZJ24D,24V,23.63-24.85V,500	
D703	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D704	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D705	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D706	BY430004	0403-000509	0403-000509	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
D707	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D708	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D709	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D805	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
LD601	BY430016	0601-000517	0601-000517	LED-IR;RECTANGULA,4x6.0mm,75mW,6V,950	
LD6B01	70796042	0601-000494	A4150-0089	LED-IR;ROUND,5mm,140mW,5V,940nm,-	
LD701	70796042	0601-000494	A4150-0089	LED-IR;ROUND,5mm,140mW,5V,940nm,-	
LD702	70796042	0601-000494	A4150-0089	LED-IR;ROUND,5mm,140mW,5V,940nm,-	
LD703	BY430066	0601-001201	0601-001201	LED;ROUND,RED,3mm,635nm	
ZD1P01	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD1P02	BY430005	0403-000717	0403-000717	DIODE-ZENER;MTZJ5.1B,5.1V,4.94-5.2V,500m	
ZD1P03	BY430013	0403-000720	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
ZD1SF1	70796158	0403-000539	62169-423-030	DIODE-ZENER;MTZ18C,18V,17.42-18.33V,500m	
ZD1SF2	70795591	0403-000294	A4106-0006	DIODE-ZENER;MTZ4.7B,4.7V,4.55-4.80V,500m	
ZD401	70795272	0403-000390	A4106-0062	DIODE-ZENER;UZP33B,33V,31.4-34.6V,1W,DO-	
ZD801	BY430064	0403-000595	0403-000595	DIODE-ZENER;MTZJ6.2,6.2V,5.78-6.44V,500m	
<INDUCTORS>					
BD1SD1	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
BD1SF1	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
BD1SS2	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
BD1SS3	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
FL3A01	BY330004	AC27-80100A	AC27-80100A	COIL-OSC;126QN-K5272YHC=K,-,AM	
FL3D01	BY330055	AC27-82001C	AC27-82001C	COIL-BIAS OSC;B02,W(TOKO)VX1850,-	
L1SS01	BY330056	AC29-30050B	AC29-30050B	FILTER-LINE NOISE;-,400uH,-,AC250V,TR12.	⚠
L1SS02	BY330008	AC29-30050C	AC29-30050C	FILTER-LINE NOISE;-,25MH,0.35A,AC250V,BS	⚠

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
L1SS31	70796213	AC27-12001N	A1130-0092	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
L1SS32	70796213	AC27-12001N	A1130-0092	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
L301	70795841	2701-000206	62427-010-294	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
L302	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L303	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L304	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L305	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L306	70796361	2701-000119	62427-020-121	INDUCTOR-AXIAL;120UH,5%,2.4X3.4MM	
L310	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3A01	70795171	2702-000120	62427-813-153	INDUCTOR-RADIAL;15mH,5%,6.2x7.4mm	
L3A02	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L3A03	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3D01	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L401	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L402	BY330003	3301-000297	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
L4N01	70796075	2701-000188	62427-020-479	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
L4N02	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L4N03	70796075	2701-000188	62427-020-479	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
L4N04	BY330003	3301-000297	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
L502	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L503	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L601	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L603	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L604	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L605	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L6B01	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L6B02	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L6P03	70795162	2701-000160	62427-020-220	INDUCTOR-AXIAL;22UH,5%,2.4X3.4MM	
L6P04	BY330054	2701-000201	2701-000201	INDUCTOR-AXIAL;5.6UH,5%,2.4X3.4MM	
L6P05	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L702	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L803	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L804	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L807	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L808	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L809	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L810	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L811	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L812	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L813	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
L814	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
<CAPACITORS>					
C1P101	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P102	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C1P103	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P104	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C1P105	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C1P106	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C1P107	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P108	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C1P110	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P113	70795114	2401-001915	A1104-0608	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1P114	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P115	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P116	70795114	2401-001915	A1104-0608	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1SD03	70795417	2201-000934	A1100-0580	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,18x	
C1SD04	70795417	2201-000934	A1100-0580	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,18x	
C1SD11	BY130283	2401-003302	2401-003302	C-AL;47uF,20%,400V,GP,TP,18X31.5,7.	
C1SD12	BY130268	2301-000140	2301-000140	C-FILM,PEF;10nF,10%,630V,BK,16.5X9.5X5.7	
C1SF12	BY130284	2401-000015	2401-000015	C-AL;33uF,20%,50V,WT,-,6.3x11mm,2.5	
C1SF13	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C1SF14	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1SF15	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C1SS01	BY130272	2305-001021	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	⚠
C1SS02	BY130272	2305-001021	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	⚠
C1SS12	BY130258	2201-000129	2201-000129	C-CERAMIC,DISC;100pF,10%,1KV,Y5P,TP,6x5,	
C1SS31	70795431	2401-000385	61637-511-100	C-AL;10uF,20%,100V,GP,TP,6.3x11,5	
C1SS32	BY130045	2401-001126	2401-001126	C-AL;330uF,20%,25V,WT,TP,10x12.5,5	
C1SS33	70796014	2401-002162	A1104-0290	C-AL;1000uF,20%,25V,WT,TP,10x20,5mm	
C1SS34	BY130045	2401-001126	2401-001126	C-AL;330uF,20%,25V,WT,TP,10x12.5,5	
C1SS35	70796291	2401-001992	A1104-0289	C-AL;2200UF,20%,10V,WT,TP,10X20MM,5	
C1SS36	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C1SS37	BY130281	2401-003046	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C1SS38	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C1SS39	70796098	2301-000129	B1102-0125	C-FILM,PEF;100nF,5%,50V,10X9X4.3X5,5mm,T	
C1SS40	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C1SS41	BY130270	2301-000423	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C301	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C302	BY130024	2301-000283	61509-923-478	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C303	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C304	70795080	2202-000216	2202-000216	C-CERAMIC,MLC-AXIAL;.027NF,5%,50V,SL,TP,	
C305	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C306	BY130264	2202-000814	2202-000814	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP	
C307	70795076	2202-000162	61407-117-150	C-CERAMIC,MLC-AXIAL;.015NF,5%,50V,SL,TP,	
C308	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C309	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C310	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C311	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C312	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C313	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C314	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C315	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C316	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C318	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C320	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C321	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C322	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C323	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C324	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C325	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C326	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C327	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C328	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C329	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C330	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C331	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C332	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C333	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C334	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C335	70795114	2401-001915	A1104-0608	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C336	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C337	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C338	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C339	BY130021	2202-000854	A1100-0505	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,	
C340	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C341	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C342	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C343	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C345	BY130260	2201-002031	2201-002031	C-CERAMIC,DISC;5pF,0.25pF,50V,NPO,TP,5x3	
C346	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C347	BY130173	2202-000286	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C348	BY130173	2202-000286	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C349	BY130265	2202-000849	2202-000849	C-CERAMIC,MLC-AXIAL;18pF,5%,50V,CH,TP,3.	
C350	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C360	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C380	70795616	2202-000243	61407-117-330	C-CERAMIC,MLC-AXIAL;33pF,5%,50V,SL,TP,3.	
C381	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C390	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C399	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A01	70795626	2401-003122	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C3A02	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A04	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A07	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3A08	BY130041	2301-001014	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A09	BY130041	2301-001014	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A10	BY130085	2301-000314	2301-000314	C-FILM,PEF;8.2nF,5%,50V,TP,6.5x3.0x5.5mm	
C3A11	70693281	2301-000392	61507-121-481	C-FILM,PEF;15nF,5%,50V,TP,6.5x8.5x3.2mm,	
C3A12	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3A13	BY130269	2301-000161	2301-000161	C-FILM,PEF;12nF,5%,50V,6.5X5.5X3.0X5,5mm	
C3A14	BY130041	2301-001014	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A15	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3A16	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C3A17	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A18	70795094	2301-000402	61507-121-341	C-FILM,PEF;1nF,5%,50V,TP,5x7x2.8mm,5mm	
C3A21	BY130267	2301-000008	2301-000008	C-FILM,PEF;2.2nF,5%,50V,TP,5.5X7X3,5mm	
C3A23	BY130277	2401-001169	2401-001169	C-AL;33UF,20%,16V,GP,-,6.3X7,2.5MM	
C3A24	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A25	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A29	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A30	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3D01	BY130024	2301-000283	61509-923-478	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C3D02	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3D03	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3D04	70699067	2301-000445	61507-121-431	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C3D05	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C402	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C403	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C404	BY130276	2401-001074	2401-001074	C-AL;330NF,20%,50V,GP,TP,4X5,2.5MM	
C405	BY130281	2401-003046	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C407	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C410	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N01	70795338	2202-000848	A1100-0563	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4N02	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N03	70693317	2202-000806	61407-117-223	C-CERAMIC,MLC-AXIAL;220pF,10%,50V,Y5P,TP	
C4N04	BY130274	2401-000661	2401-000661	C-AL;2.2uF,20%,50V,GP,TP,5x11,5	
C4N05	70795585	2301-000383	61507-121-471	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C4N06	70795585	2301-000383	61507-121-471	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C4N07	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N08	70795338	2202-000848	A1100-0563	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4N09	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N10	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N11	BY130279	2401-002062	2401-002062	C-AL;3.3UF,20%,50V,GP,TP,5X11,2.5	
C4N12	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N13	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N14	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N15	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N16	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C4N17	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N18	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N19	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C4N21	BY130261	2201-002069	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NPO,TP,4	
C4N22	BY130261	2201-002069	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NPO,TP,4	
C4N23	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C4N24	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C501	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C502	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C503	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C504	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C505	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C506	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C507	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C508	70699067	2301-000445	61507-121-431	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C509	BY130270	2301-000423	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C510	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C511	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C512	BY130266	2202-000863	2202-000863	C-CERAMIC,MLC-AXIAL;560pF,10%,50V,Y5P,TP	
C513	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C514	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C515	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C516	BY130270	2301-000423	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C517	70699067	2301-000445	61507-121-431	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C518	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C519	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C520	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C521	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C522	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C523	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C524	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C525	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C526	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C527	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C529	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C530	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C531	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C532	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C601	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C602	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C603	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C604	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C605	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C607	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C608	70796210	2401-000118	A1104-0476	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C610	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C611	70693281	2301-000392	61507-121-481	C-FILM,PEF;15nF,5%,50V,TP,6.5x8.5x3.2mm,	
C612	70796210	2401-000118	A1104-0476	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C614	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C618	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C619	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C620	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C621	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C622	70693497	2301-000471	61507-121-571	C-FILM,PEF;68nF,5%,50V,TP,9x12x4.5mm,5mm	
C623	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C624	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	
C625	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	
C626	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	
C627	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C628	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C633	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C634	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C635	BY130072	2202-000183	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C636	BY130072	2202-000183	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C637	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C638	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C639	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C640	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C641	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C645	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C646	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C691	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C692	70693497	2301-000471	61507-121-571	C-FILM,PEF;68nF,5%,50V,TP,9x12x4.5mm,5mm	
C6B01	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B02	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B03	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C6B04	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C6B05	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C6B09	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C6P01	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C6P02	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C6P03	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C6P04	70795080	2202-000216	2202-000216	C-CERAMIC,MLC-AXIAL;.027NF,5%,50V,SL,TP,	
C6P05	70795080	2202-000216	2202-000216	C-CERAMIC,MLC-AXIAL;.027NF,5%,50V,SL,TP,	
C6P06	BY130271	2301-000458	2301-000458	C-FILM,PEF;56nF,5%,50V,TP,8x12x4.5mm,5mm	
C6P07	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C6P08	BY130173	2202-000286	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C6P10	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C6P11	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C6P12	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C6P13	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C6P14	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C6P20	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C701	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C702	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C703	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C706	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C707	70795626	2401-003122	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C708	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C711	70795076	2202-000162	61407-117-150	C-CERAMIC,MLC-AXIAL;.015NF,5%,50V,SL,TP,	
C712	70795076	2202-000162	61407-117-150	C-CERAMIC,MLC-AXIAL;.015NF,5%,50V,SL,TP,	
C816	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C821	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C822	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C828	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C829	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C830	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C831	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C832	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C833	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C837	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C838	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C841	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
<RESISTORS>					
R1P103	BY230022	2001-000034	2001-000034	R-CARBON;220OHM,5%,1/4W,AA,TP,-	
R1P105	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P106	BY230024	2001-000611	2001-000611	R-CARBON;3.9KOHM,5%,1/4W,AA,TP,-	
R1P107	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P108	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P109	70795061	2001-000038	61048-227-391	R-CARBON;390ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R1P110	70795061	2001-000038	61048-227-391	R-CARBON;390ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R1P111	BY230166	2001-000110	2001-000110	R-CARBON;10ohm,5%,1/4,AA,TP,2.4X6.4mm	
R1P112	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P115	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P116	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P117	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P119	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P120	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P121	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R1P122	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P123	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P125	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P127	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R1P128	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1SD11	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R1SD12	70795003	2001-000302	61048-177-100	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SD13	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R1SD14	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R1SD15	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R1SD16	70796274	2003-000273	A1004-0198	R-METAL OXIDE;33Kohm,5%,2W,AA,TP,6x16mm	
R1SD31	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SD32	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R1SS10	BY230170	2006-000262	2006-000262	R-CEMENT;2.7ohm,10%,2W,CB,ST,7.5x11x20.	
R1SS11	70796274	2003-000273	A1004-0198	R-METAL OXIDE;33Kohm,5%,2W,AA,TP,6x16mm	
R1SS13	BY230003	2003-000148	A1004-0227	R-METAL OXIDE;100OHM,5%,2W,AE,TP,6X16MM	
R1SS31	70795009	2001-000440	61048-177-109	R-CARBON;1ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SS32	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R1SS33	70795640	2004-000869	A1006-0592	R-METAL;3Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R1SS34	70795638	2004-000459	A1006-0423	R-METAL;2.2Kohm,1%,1/8W,AA,TP,1.8x3.2m	
R301	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R302	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R304	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R305	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R306	70795012	2001-000232	61048-177-132	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R308	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R309	BY230037	2001-000723	2001-000723	R-CARBON;4.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R311	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R312	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R313	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R314	70795050	2001-000924	61048-177-681	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R315	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R316	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R317	70795030	2001-000003	61048-177-331	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R318	70795030	2001-000003	61048-177-331	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R320	BY230096	2001-000009	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,-	
R321	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R322	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R325	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R326	70795043	2001-000832	61048-177-511	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R327	70795043	2001-000832	61048-177-511	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R328	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R329	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R330	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R331	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R332	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R333	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R334	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R335	70795044	2001-000800	61048-177-512	R-CARBON;5.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R336	70795014	2001-000008	61048-177-153	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R341	70795059	2001-001000	61048-177-823	R-CARBON;82Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R342	BY230038	2001-000812	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R343	BY230010	2001-001031	61048-177-913	R-CARBON;91Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R346	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R347	70795049	2001-000904	61048-177-621	R-CARBON;620ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R348	70795609	2001-000605	61048-177-362	R-CARBON;3.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A01	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R3A04	70795012	2001-000232	61048-177-132	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A05	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A06	70795607	2001-000405	61048-177-181	R-CARBON;180ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A07	70795033	2001-000645	61048-177-334	R-CARBON;330Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A08	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R3A09	70795046	2001-000802	61048-177-562	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A10	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3A11	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R3A12	70796025	2001-000458	61048-177-229	R-CARBON;2.2ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A13	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R3A14	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A16	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R3A17	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A18	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A19	70795607	2001-000405	61048-177-181	R-CARBON;180ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A21	70795049	2001-000904	61048-177-621	R-CARBON;620ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A22	BY230037	2001-000723	2001-000723	R-CARBON;4.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A23	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A24	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A25	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R3A26	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R3A28	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A30	70795354	2001-000773	61048-177-474	R-CARBON;470Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A37	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3D01	70796129	2001-000793	61048-177-470	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D02	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D03	70795042	2001-000745	61048-177-479	R-CARBON;4.7ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R401	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R402	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R403	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R404	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R405	BY230165	2001-000044	2001-000044	R-CARBON;1.2Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R406	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R407	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R408	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R4N01	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R4N02	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N03	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N04	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N05	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N06	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R501	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R502	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R503	70795057	2001-000995	61048-177-821	R-CARBON;820OHM,5%,1/8W,AA,TP,-	
R504	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R505	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R506	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R507	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R508	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R509	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R510	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R511	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R512	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R514	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R516	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R517	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R518	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R519	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R520	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R521	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R522	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R523	70795022	2001-000508	61048-177-224	R-CARBON;220Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R524	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R525	70795506	2001-000577	61048-177-202	R-CARBON;2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R533	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R540	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R570	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R571	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R604	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R605	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R608	70795047	2001-000864	61048-177-563	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R609	70795047	2001-000864	61048-177-563	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R613	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R641	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R642	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R644	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R650	70796369	2003-000259	A1004-0357	R-METAL OXIDE;3.9OHM,5%,2W,AE,TP,6X16MM	
R651	70795052	2001-000010	61048-177-683	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R652	70795024	2001-000568	61048-177-270	R-CARBON;27ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R654	BY230038	2001-000812	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R655	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R656	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R657	70795052	2001-000010	61048-177-683	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R660	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R661	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R666	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R667	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R668	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R669	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R670	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R671	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R672	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R673	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R674	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R675	BY230164	2001-000032	2001-000032	R-CARBON;180ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R676	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R677	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R678	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R679	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R682	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R685	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R687	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R690	70795047	2001-000864	61048-177-563	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R691	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R692	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R693	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R694	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R695	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R696	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R6B01	70796024	2001-000384	61048-177-161	R-CARBON;160ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6B02	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6B03	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6B10	70796067	2001-000362	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6B11	70796067	2001-000362	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6P01	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P02	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P03	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R6P04	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R6P05	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R6P06	BY230038	2001-000812	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P07	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P08	70795028	2001-000007	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6P11	BY230090	2001-000005	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,-	
R706	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R707	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R708	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R709	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R710	70795008	2001-000435	61048-177-105	R-CARBON;1Mohm,5%,1/8W,AA,TP,1.8x3.2mm	
R727	70795014	2001-000008	61048-177-153	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R728	70795014	2001-000008	61048-177-153	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R731	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R732	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R803	BY230167	2001-000116	2001-000116	R-CARBON;820ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R805	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R806	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R807	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R808	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R810	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R811	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R812	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R813	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R814	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R815	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R816	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R821	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R822	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W072	70795004	2001-000281	61048-177-101	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
W229	70795609	2001-000605	61048-177-362	R-CARBON;3.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
<MISCELLANEOUS>					
CN1SS1	70796223	3711-000178	A6010-0459	CONNECTOR-HEADER;1WALL,2P,1R,3.96mm,STRA	
CN301	70796387	3708-000391	A6013-0942	CONNECTOR-FPC/FC/PIC;10P,1.25MM,STRAIGHT	
CN3A01	BY634038	3708-001302	3708-001302	CONNECTOR-FPC/FC/PIC;7P,1.25mm,STRAIGHT,	
CN3A02	70796246	3711-002445	B6010-0915	CONNECTOR-HEADER;BOX,2P,2R,1.5MM,STRAIGH	
CN4N01	BY634116	3711-003176	3711-003176	CONNECTOR-HEADER;NOWALL,10P,1R,2.5mm,ANG	
CN601	BY634047	AC39-20817S	AC39-20817S	LEAD CONNECTOR-ASSY;DP,SMH200-02,YBH200-	
CN602	BY634003	3708-001163	3708-001163	CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT,	
CN604	BY634026	3711-003749	3711-003749	CONNECTOR-HEADER;BOX,8P,2R,2mm,STRAIGHT,	
CN701	70795274	3711-001198	A6010-0264	CONNECTOR-HEADER;NOWALL,10P,1R,2mm,ANGLE	
CN702	70795274	3711-001198	A6010-0264	CONNECTOR-HEADER;NOWALL,10P,1R,2mm,ANGLE	
CN704	BY634040	3711-004013	3711-004013	CONNECTOR-HEADER;3WALL,10P,1R,2mm,STRAIG	
CN705	BY634039	3710-001385	3710-001385	CONNECTOR-SOCKET;10P,1R,2mm,ANGLE,SN	
DT701	BY634119	AC07-20051C	AC07-20051C	VF-DISPLAY;SVV-07SS27,15SEG,20.5X75.0,SV	
F1SS01	BY634112	3601-001123	3601-001123	FUSE-FERRULE;250V,1.6A,TIME-LAG,CERAMIC,	⚠
JC801	BY634117	3722-001093	3722-001093	JACK-RCA;42P,3.81MM,SN,BLU/BLK,#20-28	
JC802	BY634121	AC37-22002E	AC37-22002E	JACK-PIN;3.5MM,DPAE9634,2P,TR,-	
PT1SS1	BY634120	AC26-00001A	AC26-00001A	TRANS-SWITCHING;-,230V,DEMCO,EE2821,0.5M	⚠
RM701	BY634036	AC59-60060A	AC59-60060A	MODULE-REMOCON;GP1U281R,SHARP,38KHZ,-,-,	
SW601	BY632004	AC34-20100A	AC34-20100A	SWITCH-MODE;-,-,X-9,-	
SW602	BY632005	AC34-20100B	AC34-20100B	SWITCH-REC;-,-,X-9,-	
SW701	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW708	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW711	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW711	70795181	3404-001008	3404-001008	SWITCH-TACT;12V,20mA,160+-50,6x7.9x3.5mm	
SW713	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW714	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW715	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW716	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW717	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW718	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW801	BY632010	3404-000135	3404-000135	SWITCH-TACT;12V,50mA,160+-50gf,7.4x7.1mm	
TM401	BY630053	AC40-30072H	AC40-30072H	TM-BLOCK;TCMK0601PD08A,PAL-BG/I/DK,HI-F	
VA1SS1	BY634022	1405-001026	1405-001026	VARISTOR;470V,600A,9x7mm,TP	⚠
XT301	BY633009	2801-001397	2801-001397	CRYSTAL-UNIT;4.433619MHZ,HC-49/U-S 15PPM	
XT4N01	BY633011	2801-003171	2801-003171	CRYSTAL-UNIT;18.432MHz,20PPM,28-AAM,4PF,	
XT601	BY633003	2801-003318	2801-003318	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAP,12.5	
XT602	BY633010	2801-003139	2801-003139	CRYSTAL-UNIT;8MHz,50ppm,28-AAA,22pF,80oh	
XT701	BY633010	2801-003139	2801-003139	CRYSTAL-UNIT;8MHz,50ppm,28-AAA,22pF,80oh	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark

V-709B

-PACKING PARTS-

A701	BY634210	AC69-50913X	AC69-50913X	PACKING CASE;V-709B,-,-,428,-
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685
UT01	BY634129	AC59-00005B	AC59-00005B	REMOCON-ASSY;-,VT-629B,-,45KEY,V-709B,-
Y101	BY634152	AC68-00156A	AC68-00156A	MANUAL-USERS;V-729B,MOJO100,-, ,ENG,-
Y102	BY634127	AC39-42001L	AC39-42001L	CABLE-RF ASSY;PAL,-,1.2M,-,-,-,-

-INSTRUMENT PARTS-

1	BY730404	AC97-00122B	AC97-00122B	ASSY-PANEL FRONT;V-709B/TSB,HIPS94HB,GRA
21	BY730331	AC64-52175D	AC64-52175D	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V
22	BY730093	AC61-62032A	AC61-62032A	SPRING-MASK;X-9,-,SUS,-,4.4,-,SV-C130
101	BY730312	AC64-30899B	AC64-30899B	CABINET-TOP;V-629G/TSB,PCM MD552,SECC,T0
102	BY730280	AC63-32128A	AC63-32128A	COVER-BOTTOM;SV-C140F,SECC,387.7X197.6,T
153	70790218	AC60-12126A	67158-240-121	SCREW-BH;-,BH,-,4*12,FE,FZY,-,-,-
155	70790082	AC60-12134A	67158-240-163	SCREW-TAP BH;-,BH,-,2-4X16,-,FE
156	BY730204	AC60-00001A	AC60-00001A	SCREW-MACHINE;-,BH,*,4X12,M4,L12,BLK,SMC
157	70790002	AC60-10063A	60504-0040-00	SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18
200	BY634126	AC39-12022K	AC39-12022K	POWER-CORD;Y352160,H03VVH2-F,-,BS6500,1.
CN3A1S	BY634118	3809-001111	3809-001111	CABLE-FLAT;30V,80C,130mm,7P,1.25mm,UL289
CN602A	BY634007	3809-001049	3809-001049	CABLE-FLAT;30V,80C,100MM,5P,1.25MM,UL289
LD601S	BY730082	AC61-21009A	AC61-21009A	HOLDER-LED;-,POM(M90-44),-,BLK,-,X-9
S601S	BY730080	AC61-21008A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9
S602S	BY730080	AC61-21008A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9
TM401B	BY730221	AC61-11061C	AC61-11061C	CONNECTOR BOARD-ASSY;V-629F/TSB,HIPS94,H

-MECHANICAL PARTS-

SAME AS V-729B

-ELECTRICAL PARTS-

601	BY630061	AC92-00029A	AC92-00029A	ASSY-PCB-MAIN;V-709B/TSB,2S,VFD,PDC
602	BY630080	AC93-10860V	AC93-10860V	ASSY-SUB(F-NICAM);SV-627F/XEF,PAL COBRA
701	BY630081	AC93-10866X	AC93-10866X	ASSY-F/TIMER;COBRA-PAL,VFD

<INTEGRATED CIRCUITS>

IC1SS1	BY530004	0604-001028	0604-001028	PHOTO-COUPLER;TR,50-600%,250mW,DIP-4,ST
IC1SS2	70795271	AC14-12006D	A4008-0757	IC;KA431Z,TO-92,TAPING
IC301	BY631061	1204-001410	1204-001410	IC-VIDEO PROCESS;LA71590M,QFP,100P,-,PLA
IC4N01	BY631063	1204-001516	1204-001516	IC-AUDIO PROCESSOR;MSP3417D,DIP,52P,551M
IC501	BY631023	1204-001479	1204-001479	IC-AUDIO PROCESSOR;LA72634AM,QFP,64P,400
IC601	BY631033	AC09-00024B	AC09-00024B	IC-MCU;UPD784927GF-119-3BA,100P,-,N90-11
IC602	BY631022	1003-001162	1003-001162	IC-MOTOR DRIVER;KA3082,SIP,10PIN,25MIL,D
IC604	70795269	AC14-12006C	AC14-12006C	IC;KA7533,DIP,-
IC605	BY631058	1103-001101	1103-001101	IC-EEPROM;24C08,1028x8BIT,DIP,8P,300MIL,
IC608	BY631059	1203-000515	1203-000515	IC-VOL. DETECTOR;7042,TO-92,3P,177MIL,PL
IC6P01	BY631068	AC09-12014Z	AC09-12014Z	IC-MCU;LC74776M,30P,MFP,OSD/VPS/PDC I
IC701	BY631011	1003-001034	1003-001034	IC-VFD;UPD16312,QFP,44P,9.5MIL,-,9.5M

<TRANSISTORS>

PT601	BY530005	0604-001122	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,
PT602	BY530005	0604-001122	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,
Q1P101	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L
Q1P102	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L
Q1P103	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L
Q1P104	70693410	0501-000610	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,
Q1P105	70795137	0504-000116	62137-701-010	TR-DIGITAL;KSR1001,NPN,300mW,4.7K-4.7K,T
Q1P106	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q1P107	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P109	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q1P110	70693238	0504-000118	62137-701-012	TR-DIGITAL;KSR1003,NPN,300mW,22K-22K,TO-
Q1P111	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q1P112	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P114	70693265	0501-000616	62137-302-441	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L
Q1P115	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q1P116	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q1P117	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q1SR01	BY631060	1203-001049	1203-001049	IC-PWM CONTROLLER:1L0380,TO-220F,4P,10MI
Q302	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T
Q303	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q304	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q308	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q309	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q310	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-
Q3A01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T
Q3A03	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q3A04	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q3A05	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
Q3A06	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3D01	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q3D02	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3D03	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q602	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q6P01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q6P02	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q6P03	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q701	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q802	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q803	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q804	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
S601	BY530003	0603-001011	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
S602	BY530003	0603-001011	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
<DIODES>					
D1P101	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P103	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P104	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P105	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P108	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P109	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P110	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P111	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P113	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P115	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P117	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P118	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1P119	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D1SD31	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SD32	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS01	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS02	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS03	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS04	BY430012	0402-001196	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS11	BY430008	0402-000276	0402-000276	DIODE-RECTIFIER;UF4007,1KV,1A,DO-41,TP	
D1SS12	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS31	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS32	BY430010	0402-001194	0402-001194	DIODE-RECTIFIER;UG2D,200V,2A,DO-204AC,TP	
D1SS33	BY430065	0404-001069	0404-001069	DIODE-SCHOTTKY;B10A45VI,45V,10A,TO-220IS	
D1SS44	BY430011	0402-001195	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D302	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D401	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D4N01	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D603	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D604	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D605	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D611	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D620	70796385	0402-000127	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D701	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D702	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D703	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D704	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D705	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D707	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D708	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D709	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D805	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
LD601	BY430016	0601-000517	0601-000517	LED-IR;RECTANGULA,4x6.0mm,75mW,6V,950	
LD701	70796042	0601-000494	A4150-0089	LED-IR;ROUND,5mm,140mW,5V,940nm,-	
LD702	70796042	0601-000494	A4150-0089	LED-IR;ROUND,5mm,140mW,5V,940nm,-	
LD703	BY430066	0601-001201	0601-001201	LED;ROUND,RED,3mm,635nm	
ZD1P01	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD1P02	BY430005	0403-000717	0403-000717	DIODE-ZENER;MTZJ5.1B,5.1V,4.94-5.2V,500m	
ZD1P03	BY430013	0403-000720	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
ZD1SF1	70796158	0403-000539	62169-423-030	DIODE-ZENER;MTZ18C,18V,17.42-18.33V,500m	
ZD1SF2	70795591	0403-000294	A4106-0006	DIODE-ZENER;MTZ4.7B,4.7V,4.55-4.80V,500m	
ZD401	70795272	0403-000390	A4106-0062	DIODE-ZENER;UZP33B,33V,31.4-34.6V,1W,DO-	
ZD701	BY430014	0403-001141	0403-001141	DIODE-ZENER;MTZJ24D,24V,23.63-24.85V,500	
ZD702	BY430004	0403-000509	0403-000509	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500	
ZD801	BY430064	0403-000595	0403-000595	DIODE-ZENER;MTZJ6.2,6.2V,5.78-6.44V,500m	
<INDUCTORS>					
BD1SD1	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
BD1SF1	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
BD1SS2	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
BD1SS3	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
FL3A01	BY330004	AC27-80100A	AC27-80100A	COIL-OSC;126QN-K5272YHC=K,-,AM	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
FL3D01	BY330055	AC27-82001C	AC27-82001C	COIL-BIAS OSC;B02,W(TOKO)VX1850,-	
L1SS01	BY330056	AC29-30050B	AC29-30050B	FILTER-LINE NOISE;-,400uH,-,AC250V,TR12.	
L1SS02	BY330008	AC29-30050C	AC29-30050C	FILTER-LINE NOISE;-,25MH,0.35A,AC250V,BS	
L1SS31	70796213	AC27-12001N	A1130-0092	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
L1SS32	70796213	AC27-12001N	A1130-0092	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
L301	70795841	2701-000206	62427-010-294	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
L302	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L303	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L304	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L305	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L306	70796361	2701-000119	62427-020-121	INDUCTOR-AXIAL;120UH,5%,2.4X3.4MM	
L310	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3A01	70795171	2702-000120	62427-813-153	INDUCTOR-RADIAL;15mH,5%,6.2x7.4mm	
L3A02	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L3A03	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3D01	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L401	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L402	BY330003	3301-000297	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
L4N01	70796075	2701-000188	62427-020-479	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
L4N02	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L4N03	70796075	2701-000188	62427-020-479	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
L4N04	BY330003	3301-000297	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
L502	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L503	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L601	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L603	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L604	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L605	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L6P03	70795162	2701-000160	62427-020-220	INDUCTOR-AXIAL;22UH,5%,2.4X3.4MM	
L6P04	BY330054	2701-000201	2701-000201	INDUCTOR-AXIAL;5.6UH,5%,2.4X3.4MM	
L6P05	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L701	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L702	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L803	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L804	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L807	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L808	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L809	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L810	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L811	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L812	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L813	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
L814	70795644	AC27-92001M	A1160-0016	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
<CAPACITORS>					
C1P101	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P102	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C1P103	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P104	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C1P105	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C1P106	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C1P107	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C1P108	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C1P110	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P113	70795114	2401-001915	A1104-0608	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1P114	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P115	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1P116	70795114	2401-001915	A1104-0608	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C1SD03	70795417	2201-000934	A1100-0580	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,18x	
C1SD04	70795417	2201-000934	A1100-0580	C-CERAMIC,DISC;3.3nF,20%,400V,Y5U,TP,18x	
C1SD11	BY130283	2401-003302	2401-003302	C-AL;47uF,20%,400V,GP,TP,18X31.5,7.	
C1SD12	BY130268	2301-000140	2301-000140	C-FILM,PEF;10nF,10%,630V,BK,16.5X9.5X5.7	
C1SF12	BY130284	2401-000015	2401-000015	C-AL;33uF,20%,50V,WT,-,6.3x11mm,2.5	
C1SF13	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C1SF14	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C1SF15	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C1SS01	BY130272	2305-001021	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	
C1SS02	BY130272	2305-001021	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	
C1SS12	BY130258	2201-000129	2201-000129	C-CERAMIC,DISC;100pF,10%,1KV,Y5P,TP,6x5,	
C1SS31	70795431	2401-000385	61637-511-100	C-AL;10uF,20%,100V,GP,TP,6.3x11,5	
C1SS32	BY130045	2401-001126	2401-001126	C-AL;330uF,20%,25V,WT,TP,10x12.5,5	
C1SS33	70796014	2401-002162	A1104-0290	C-AL;1000uF,20%,25V,WT,TP,10x20,5mm	
C1SS34	BY130045	2401-001126	2401-001126	C-AL;330uF,20%,25V,WT,TP,10x12.5,5	
C1SS35	70796291	2401-001992	A1104-0289	C-AL;2200UF,20%,10V,WT,TP,10X20MM,5	
C1SS36	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C1SS37	BY130281	2401-003046	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C1SS38	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C1SS39	70796098	2301-000129	B1102-0125	C-FILM,PEF;100nF,5%,50V,10X9X4.3X5,5mm,T	
C1SS40	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C1SS41	BY130270	2301-000423	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C301	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C302	BY130024	2301-000283	61509-923-478	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C303	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C304	70795080	2202-000216	2202-000216	C-CERAMIC,MLC-AXIAL;.027NF,5%,50V,SL,TP,	
C305	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C306	BY130264	2202-000814	2202-000814	C-CERAMIC,MLC-AXIAL;390pF,10%,50V,Y5P,TP	
C307	70795076	2202-000162	61407-117-150	C-CERAMIC,MLC-AXIAL;.015NF,5%,50V,SL,TP,	
C308	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C309	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C310	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C311	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C312	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C313	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C314	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C315	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C316	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C318	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C320	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C321	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C322	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C323	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C324	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C325	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C326	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C327	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C328	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C329	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C330	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C331	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C332	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C333	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C334	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C335	70795114	2401-001915	A1104-0608	C-AL;1uF,20%,50V,GP,TP,3x5,5	
C336	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C337	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C338	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C339	BY130021	2202-000854	A1100-0505	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,	
C340	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C341	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C342	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C343	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C345	BY130260	2201-002031	2201-002031	C-CERAMIC,DISC;5pF,0.25pF,50V,NPO,TP,5x3	
C346	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C347	BY130173	2202-000286	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C348	BY130173	2202-000286	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C349	BY130265	2202-000849	2202-000849	C-CERAMIC,MLC-AXIAL;18pF,5%,50V,CH,TP,3.	
C350	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C360	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C380	70795616	2202-000243	61407-117-330	C-CERAMIC,MLC-AXIAL;33pF,5%,50V,SL,TP,3.	
C381	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C390	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C399	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A01	70795626	2401-003122	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C3A02	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A04	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A07	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3A08	BY130041	2301-001014	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A09	BY130041	2301-001014	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A10	BY130085	2301-000314	2301-000314	C-FILM,PEF;8.2nF,5%,50V,TP,6.5x3.0x5.5mm	
C3A11	70693281	2301-000392	61507-121-481	C-FILM,PEF;15nF,5%,50V,TP,6.5x8.5x3.2mm,	
C3A12	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3A13	BY130269	2301-000161	2301-000161	C-FILM,PEF;12nF,5%,50V,6.5X5.5X3.0X5,5mm	
C3A14	BY130041	2301-001014	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A15	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3A16	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C3A17	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A18	70795094	2301-000402	61507-121-341	C-FILM,PEF;1nF,5%,50V,TP,5x7x2.8mm,5mm	
C3A21	BY130267	2301-000008	2301-000008	C-FILM,PEF;2.2nF,5%,50V,TP,5.5X7X3,5mm	
C3A23	BY130277	2401-001169	2401-001169	C-AL;33UF,20%,16V,GP,-,6.3X7,2.5MM	
C3A24	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A25	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A29	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A30	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3D01	BY130024	2301-000283	61509-923-478	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C3D02	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3D03	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3D04	70699067	2301-000445	61507-121-431	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C3D05	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C402	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C403	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C404	BY130276	2401-001074	2401-001074	C-AL;330NF,20%,50V,GP,TP,4X5,2.5MM	
C405	BY130281	2401-003046	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C407	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C410	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N01	70795338	2202-000848	A1100-0563	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4N02	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N03	70693317	2202-000806	61407-117-223	C-CERAMIC,MLC-AXIAL;220pF,10%,50V,Y5P,TP	
C4N04	BY130274	2401-000661	2401-000661	C-AL;2.2uF,20%,50V,GP,TP,5x11,5	
C4N05	70795585	2301-000383	61507-121-471	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C4N06	70795585	2301-000383	61507-121-471	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C4N07	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N08	70795338	2202-000848	A1100-0563	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4N09	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N10	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N11	BY130279	2401-002062	2401-002062	C-AL;3.3UF,20%,50V,GP,TP,5X11,2.5	
C4N12	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N13	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N14	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N15	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C4N16	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C4N17	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N18	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4N19	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C4N21	BY130261	2201-002069	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NPO,TP,4	
C4N22	BY130261	2201-002069	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NPO,TP,4	
C4N23	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C4N24	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C501	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C502	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C503	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C504	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C505	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C506	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C507	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C508	70699067	2301-000445	61507-121-431	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C509	BY130270	2301-000423	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C510	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C511	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C512	BY130266	2202-000863	2202-000863	C-CERAMIC,MLC-AXIAL;560pF,10%,50V,Y5P,TP	
C513	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C514	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C515	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C516	BY130270	2301-000423	2301-000423	C-FILM,PEF;3.3NF,5%,100V,TP,7X10X4.5MM,5	
C517	70699067	2301-000445	61507-121-431	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C518	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C519	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C520	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C521	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C522	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C523	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C524	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C525	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C526	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C527	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C529	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C530	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C531	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C532	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C601	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C602	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C603	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C604	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C605	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C607	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C608	70796210	2401-000118	A1104-0476	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C610	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C611	70693281	2301-000392	61507-121-481	C-FILM,PEF;15nF,5%,50V,TP,6.5x8.5x3.2mm,	
C612	70796210	2401-000118	A1104-0476	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C614	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C618	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C619	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C620	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C621	BY130048	2401-002095	2401-002095	C-AL;47uF,20%,25V,GP,TP,6.3x5,5mm	
C622	70693497	2301-000471	61507-121-571	C-FILM,PEF;68nF,5%,50V,TP,9x12x4.5mm,5mm	
C623	70693249	2202-000807	61407-117-228	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C624	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	
C625	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C626	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	
C627	70795614	2202-000205	61407-117-220	C-CERAMIC,MLC-AXIAL;22pF,5%,50V,SL,TP,1.	
C628	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C633	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C634	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C635	BY130072	2202-000183	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C636	BY130072	2202-000183	2202-000183	C-CERAMIC,MLC-AXIAL;2.2NF,20%,16V,Y5R,TP	
C637	BY130172	2202-000263	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C638	70699092	2401-000918	61617-404-220	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C639	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C640	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C641	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C645	BY130282	2401-003107	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C646	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C691	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C692	70693497	2301-000471	61507-121-571	C-FILM,PEF;68nF,5%,50V,TP,9x12x4.5mm,5mm	
C6P01	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C6P02	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C6P03	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C6P04	70795080	2202-000216	2202-000216	C-CERAMIC,MLC-AXIAL;.027NF,5%,50V,SL,TP,	
C6P05	70795080	2202-000216	2202-000216	C-CERAMIC,MLC-AXIAL;.027NF,5%,50V,SL,TP,	
C6P06	BY130271	2301-000458	2301-000458	C-FILM,PEF;56nF,5%,50V,TP,8x12x4.5mm,5mm	
C6P07	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C6P08	BY130173	2202-000286	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C6P10	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C6P11	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C6P12	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C6P13	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C6P14	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C6P20	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C701	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C702	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C703	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C704	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C707	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C708	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C709	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C710	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C715	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C716	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C717	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C816	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C821	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C822	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C828	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C829	70693047	2202-000279	61407-117-470	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C830	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C831	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C832	BY130136	2401-002299	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C833	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C837	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C838	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C841	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
<RESISTORS>					
R1P103	BY230022	2001-000034	2001-000034	R-CARBON;220OHM,5%,1/4W,AA,TP,-	
R1P105	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P106	BY230024	2001-000611	2001-000611	R-CARBON;3.9KOHM,5%,1/4W,AA,TP,-	
R1P107	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P108	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P109	70795061	2001-000038	61048-227-391	R-CARBON;390ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R1P110	70795061	2001-000038	61048-227-391	R-CARBON;390ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R1P111	BY230166	2001-000110	2001-000110	R-CARBON;10ohm,5%,1/4,AA,TP,2.4X6.4mm	
R1P112	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P115	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P116	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P117	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P119	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P120	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P121	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R1P122	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P123	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P125	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1P127	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R1P128	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R1SD11	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R1SD12	70795003	2001-000302	61048-177-100	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SD13	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R1SD14	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R1SD15	BY230168	2001-000317	2001-000317	R-CARBON;120Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R1SD16	70796274	2003-000273	A1004-0198	R-METAL OXIDE;33Kohm,5%,2W,AA,TP,6x16mm	
R1SD31	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SD32	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R1SS10	BY230170	2006-000262	2006-000262	R-CEMENT;2.7ohm,10%,2W,CB,ST,7.5x11x20.	
R1SS11	70796274	2003-000273	A1004-0198	R-METAL OXIDE;33Kohm,5%,2W,AA,TP,6x16mm	
R1SS13	BY230003	2003-000148	A1004-0227	R-METAL OXIDE;1000HM,5%,2W,AE,TP,6X16MM	
R1SS31	70795009	2001-000440	61048-177-109	R-CARBON;1ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SS32	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R1SS33	70795640	2004-000869	A1006-0592	R-METAL;3Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R1SS34	70795638	2004-000459	A1006-0423	R-METAL;2.2Kohm,1%,1/8W,AA,TP,1.8x3.2m	
R301	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R302	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R304	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R305	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R306	70795012	2001-000232	61048-177-132	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R308	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R309	BY230037	2001-000723	2001-000723	R-CARBON;4.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R311	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R312	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R313	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R314	70795050	2001-000924	61048-177-681	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R315	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R316	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R317	70795030	2001-000003	61048-177-331	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R318	70795030	2001-000003	61048-177-331	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R320	BY230096	2001-000009	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,-	
R321	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R322	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R325	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R326	70795043	2001-000832	61048-177-511	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R327	70795043	2001-000832	61048-177-511	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R328	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R329	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R330	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R331	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R332	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R333	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R334	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R335	70795044	2001-000800	61048-177-512	R-CARBON;5.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R336	70795014	2001-000008	61048-177-153	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R341	70795059	2001-001000	61048-177-823	R-CARBON;82Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R342	BY230038	2001-000812	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R343	BY230010	2001-001031	61048-177-913	R-CARBON;91Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R346	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R347	70795049	2001-000904	61048-177-621	R-CARBON;620ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R348	70795609	2001-000605	61048-177-362	R-CARBON;3.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A01	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R3A04	70795012	2001-000232	61048-177-132	R-CARBON;1.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A05	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A06	70795607	2001-000405	61048-177-181	R-CARBON;180ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A07	70795033	2001-000645	61048-177-334	R-CARBON;330Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A08	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R3A09	70795046	2001-000802	61048-177-562	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A10	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3A11	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R3A12	70796025	2001-000458	61048-177-229	R-CARBON;2.2ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A13	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R3A14	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A16	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R3A17	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A18	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A19	70795607	2001-000405	61048-177-181	R-CARBON;180ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A21	70795049	2001-000904	61048-177-621	R-CARBON;620ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A22	BY230037	2001-000723	2001-000723	R-CARBON;4.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A23	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A24	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A25	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R3A26	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R3A28	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A30	70795354	2001-000773	61048-177-474	R-CARBON;470Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A37	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3D01	70796129	2001-000793	61048-177-470	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D02	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D03	70795042	2001-000745	61048-177-479	R-CARBON;4.7ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R401	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R402	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R403	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R404	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R405	BY230165	2001-000044	2001-000044	R-CARBON;1.2Kohm,5%,1/4W,AA,TP,2.4x6.4m	
R406	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R407	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R408	BY230019	2001-000221	11018-877-122	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,-	
R4N01	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R4N02	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N03	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N04	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N05	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4N06	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R501	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R502	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R503	70795057	2001-000995	61048-177-821	R-CARBON;820OHM,5%,1/8W,AA,TP,-	
R504	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R505	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R506	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R507	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R508	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R509	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R510	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R511	70795011	2001-000331	61048-177-123	R-CARBON;12KOHM,5%,1/8W,AA,TP,-	
R512	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R514	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R516	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R517	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R518	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R519	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R520	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R521	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R522	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R523	70795022	2001-000508	61048-177-224	R-CARBON;220Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R524	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R525	70795506	2001-000577	61048-177-202	R-CARBON;2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R533	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R540	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R570	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R571	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R604	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R605	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R608	70795047	2001-000864	61048-177-563	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R609	70795047	2001-000864	61048-177-563	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R613	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R641	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R642	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R644	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R650	70796369	2003-000259	A1004-0357	R-METAL OXIDE;3.9OHM,5%,2W,AE,TP,6X16MM	
R651	70795052	2001-000010	61048-177-683	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R652	70795024	2001-000568	61048-177-270	R-CARBON;27ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R654	BY230038	2001-000812	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R655	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R656	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R657	70795052	2001-000010	61048-177-683	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R660	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R661	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R666	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R667	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R668	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R669	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R670	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R671	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R672	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R673	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R674	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R675	BY230164	2001-000032	2001-000032	R-CARBON;180ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R676	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R677	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R678	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R679	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R682	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R685	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R687	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R690	70795047	2001-000864	61048-177-563	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R691	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R692	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R693	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R694	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R695	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R696	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R6P01	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P02	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P03	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R6P04	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R6P05	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R6P06	BY230038	2001-000812	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P07	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P08	70795028	2001-000007	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6P11	BY230090	2001-000005	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,-	
R707	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R708	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R709	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R710	70795039	2001-000780	61048-177-471	R-CARBON;470OHM,5%,1/8W,AA,TP,-	
R711	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R712	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R715	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R727	70795014	2001-000008	61048-177-153	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R728	70795014	2001-000008	61048-177-153	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R731	70795006	2001-000290	61048-177-103	R-CARBON;10KOHM,5%,1/8W,AA,TP,-	
R732	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R734	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R735	70795013	2001-000241	61048-177-152	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R750	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R803	BY230167	2001-000116	2001-000116	R-CARBON;820ohm,5%,1/4W,AA,TP,2.4x6.4mm	
R805	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R806	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R807	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R808	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R810	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R811	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R812	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R813	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R814	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R815	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R816	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R821	70795032	2001-000660	61048-177-330	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R822	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W072	70795004	2001-000281	61048-177-101	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
W229	70795609	2001-000605	61048-177-362	R-CARBON;3.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
<MISCELLANEOUS>					
CN1SS1	70796223	3711-000178	A6010-0459	CONNECTOR-HEADER;1WALL,2P,1R,3.96mm,STRA	
CN301	70796387	3708-000391	A6013-0942	CONNECTOR-FPC/FC/PIC;10P,1.25MM,STRAIGHT	
CN3A01	BY634038	3708-001302	3708-001302	CONNECTOR-FPC/FC/PIC;7P,1.25mm,STRAIGHT,	
CN3A02	70796246	3711-002445	B6010-0915	CONNECTOR-HEADER;BOX,2P,2R,1.5MM,STRAIGH	
CN4N01	BY634116	3711-003176	3711-003176	CONNECTOR-HEADER;NOWALL,10P,1R,2.5mm,ANG	
CN601	BY634047	AC39-20817S	AC39-20817S	LEAD CONNECTOR-ASSY;DP,SMH200-02,YBH200-	
CN602	BY634003	3708-001163	3708-001163	CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT,	
CN604	BY634026	3711-003749	3711-003749	CONNECTOR-HEADER;BOX,8P,2R,2mm,STRAIGHT,	
CN701	70795274	3711-001198	A6010-0264	CONNECTOR-HEADER;NOWALL,10P,1R,2mm,ANGLE	
CN702	70795274	3711-001198	A6010-0264	CONNECTOR-HEADER;NOWALL,10P,1R,2mm,ANGLE	
DT701	BY634119	AC07-20051C	AC07-20051C	VF-DISPLAY;SVV-07SS27,15SEG,20.5X75.0,SV	
F1SS01	BY634112	3601-001123	3601-001123	FUSE-FERRULE;250V,1.6A,TIME-LAG,CERAMIC,	
JC801	BY634117	3722-001093	3722-001093	JACK-RCA;42P,3.81MM,SN,BLU/BLK,#20-28	
JC802	BY634121	AC37-22002E	AC37-22002E	JACK-PIN;3.5MM,DPAE9634,2P,TR,-	
PT1SS1	BY634120	AC26-00001A	AC26-00001A	TRANS-SWITCHING;-,230V,DEMCO,EE2821,0.5M	
RM701	BY634036	AC59-60060A	AC59-60060A	MODULE-REMOCON;GP1U281R,SHARP,38KHZ,-,-	
SW601	BY632004	AC34-20100A	AC34-20100A	SWITCH-MODE;-,-,X-9,-	
SW602	BY632005	AC34-20100B	AC34-20100B	SWITCH-REC;-,-,X-9,-	
SW701	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW703	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW708	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW711	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW713	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW714	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW715	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW716	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW717	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW718	BY632002	3404-001076	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW801	BY632010	3404-000135	3404-000135	SWITCH-TACT;12V,50mA,160+-50gf,7.4x7.1mm	
TM401	BY630053	AC40-30072H	AC40-30072H	TM-BLOCK;TCMK0601PD08A,PAL-BG/I/DK,HI-F	
VA1SS1	BY634022	1405-001026	1405-001026	VARISTOR;470V,600A,9x7mm,TP	
XT301	BY633009	2801-001397	2801-001397	CRYSTAL-UNIT;4.433619MHZ,HC-49/U-S 15PPM	
XT4N01	BY633011	2801-003171	2801-003171	CRYSTAL-UNIT;18.432MHz,20PPM,28-AAM,4PF,	
XT601	BY633003	2801-003318	2801-003318	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAP,12.5	
XT602	BY633010	2801-003139	2801-003139	CRYSTAL-UNIT;8MHz,50ppm,28-AAA,22pF,80oh	

THE DIFFERENTIAL PART LIST

V-429B ONLY (Compared with V-729B)

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
-PACKING PARTS-					
A701	BY634194	AC69-50913E	AC69-50913E	PACKING CASE;V-429B,-,-,428,-	
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685	
UT01	BY634130	AC59-00005C	AC59-00005C	REMOCON-ASSY;-,V-629B,-,45KEY,V-429B,V-2	
Y101	BY634153	AC68-00157A	AC68-00157A	MANUAL-USERS;V-429B/229B/219B,MOJO100,-,	
-INSTRUMENT PARTS-					
1	BY730426	AC98-12106C	AC98-12106C	ASSY-PANEL FRONT;V-429B/TSB,HIPS94HB BLK	
21	BY730320	AC64-52160J	AC64-52160J	DOOR-CASSETTE;V-429B,ABS,94HB,T2.5,-,BLK	
101	BY730312	AC64-30899B	AC64-30899B	CABINET-TOP;V-629G/TSB,PCM MD552,SECC,T0	
TM401B	BY730224	AC61-11061F	AC61-11061F	CONNECTOR BOARD-ASSY;V-429B/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730385	AC96-10481J	AC96-10481J	ASSY-CYLINDER;CX-9,PAL 4HD	
-ELECTRICAL PARTS-					
601	BY630082	AC93-10867D	AC93-10867D	ASSY-MAIN;SV-429B/TSB,COBRA PAL I	
602			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
<TRANSISTORS>					
Q1P103			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q803			Not used		
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D4N01			Not used		
D4N02			Not used		
ZD801			Not used		
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FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
<CAPACITORS>					
C1P107			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3A22	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
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C4N15			Not used		
C4N16			Not used		
C4N17			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
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C4N21			Not used		
C4N22			Not used		
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R3A27	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A28	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A29	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A31	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A33	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
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R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		
V-229B ONLY (Compared with V-729B)					
-PACKING PARTS-					
A701	BY634198	AC69-50913J	AC69-50913J	PACKING CASE;V-229B,-,-,428,-	
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685	
UT01	BY634130	AC59-00005C	AC59-00005C	REMOCON-ASSY;-,V-629B,-,45KEY,V-429B,V-2	
Y101	BY634153	AC68-00157A	AC68-00157A	MANUAL-USERS;V-429B/229B/219B,MOJO100,-,	
-INSTRUMENT PARTS-					
1	BY730430	AC98-12106G	AC98-12106G	ASSY-PANEL FRONT;V-229B/TSB,HIPS94HB BLK	
21	BY730324	AC64-52160N	AC64-52160N	DOOR-CASSETTE;V-229B,ABS,94HB,T2.5,-,BLK	
101	BY730312	AC64-30899B	AC64-30899B	CABINET-TOP;V-629G/TSB,PCM MD552,SECC,T0	
TM401B	BY730224	AC61-11061F	AC61-11061F	CONNECTOR BOARD-ASSY;V-429B/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-	
-ELECTRICAL PARTS-					
601	BY630083	AC93-10867E	AC93-10867E	ASSY-MAIN;SV-229B/TSB,COBRA PAL I	
602			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
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Q1P103			Not used		
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q803			Not used		
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D4N01			Not used		
D4N02			Not used		
ZD801			Not used		
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FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
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L502			Not used		
L503			Not used		
<CAPACITORS>					
C1P107			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3A22	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
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C532			Not used		
C832			Not used		
C833			Not used		
C838			Not used		
<RESISTORS>					
R324	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R343			Not used		
R3A27	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A28	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A29	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A31	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A33	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		
V-219B ONLY (Compared with V-729B)					
-PACKING PARTS-					
A701	BY634211	AC69-50913Y	AC69-50913Y	PACKING CASE;V-219B,-,-,428,-	
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685	
UT01	BY634131	AC59-00005D	AC59-00005D	REMOCON-ASSY;-,VT-629W,-,45KEY,V-219B],-	
Y101	BY634153	AC68-00157A	AC68-00157A	MANUAL-USERS;V-429B/229B/219B,MOJO100,-,	
-INSTRUMENT PARTS-					
1	BY730405	AC97-00122C	AC97-00122C	ASSY-PANEL FRONT;V-219B/TSB,HIPS94HB,GRA	
21	BY730436	AC64-52175E	AC64-52175E	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V	
101	BY730312	AC64-30899B	AC64-30899B	CABINET-TOP;V-629G/TSB,PCM MD552,SECC,TO	
TM401B	BY730224	AC61-11061F	AC61-11061F	CONNECTOR BOARD-ASSY;V-429B/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-	
-ELECTRICAL PARTS-					
601	BY630062	AC92-00030A	AC92-00030A	ASSY-PCB-MAIN;V-219B/TSB,1S,VFD	
602			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
<TRANSISTORS>					
Q1P103			Not used		
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q3D03			Not used		
Q803			Not used		
<DIODES>					
D4N01			Not used		
D4N02			Not used		
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
<CAPACITORS>					
C1P107			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3A22	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
C509			Not used		
C510			Not used		
C511			Not used		
C512			Not used		
C513			Not used		
C514			Not used		
C515			Not used		
C516			Not used		
C517			Not used		
C518			Not used		
C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C832			Not used		
C833			Not used		
C838			Not used		
<RESISTORS>					
R324	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R343			Not used		
R3A27	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A28	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A29	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A31	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A33	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		
V-209UK ONLY (Compared with V-709B)					
-PACKING PARTS-					
A701	BY634201	AC69-50913M	AC69-50913M	PACKING CASE;V-209UK,-,-,428,-	
UT01	BY634132	AC59-00005E	AC59-00005E	REMOCON-ASSY;-,VT-209G,-,45KEY,V-209UK,-	
Y101	BY634154	AC68-00159A	AC68-00159A	MANUAL-USERS;V-209UK,MOJO100,-, ,ENG,-	
-INSTRUMENT PARTS-					
1	BY730433	AC98-12106K	AC98-12106K	ASSY-PANEL FRONT;V-209UK/TSB,HIPS94HB BL	
21	BY730327	AC64-52160R	AC64-52160R	DOOR-CASSETTE;V-209B,ABS,94HB,T2.5,-,BLK	
TM401B	BY730225	AC61-11061G	AC61-11061G	CONNECTOR BOARD-ASSY;V-209B/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-	
-ELECTRICAL PARTS-					
601	BY630066	AC92-00048A	AC92-00048A	ASSY-PCB-MAIN;V-209UK/TSB,1S VFD 99T	
602			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
IC601	BY631032	AC09-00024A	AC09-00024A	IC-MCU;UPD784927GF-118-3BA,100P,-,N90-11	
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,	
<TRANSISTORS>					
Q1P103			Not used		
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q803			Not used		
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
<DIODES>					
D4N01			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
D4N02			Not used		
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L811			Not used		
L812			Not used		
<CAPACITORS>					
C1P107			Not used		
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3A22	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
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C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
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C4N24			Not used		
C501			Not used		
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C514			Not used		
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C518			Not used		
C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C531			Not used		
C532			Not used		
C6P06			Not used		
C6P07			Not used		
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP	
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1	
C832			Not used		
C833			Not used		
C838			Not used		
<RESISTORS>					
R324	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R343			Not used		
R3A27	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A28	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A31	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
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R518			Not used		
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R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R533			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P05			Not used		
R6P06			Not used		
R6P09	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R810			Not used		
R811			Not used		
R821			Not used		
R822			Not used		
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC801	BY634114	3710-000482	3710-000482	CONNECTOR-SOCKET;21P,-,-,ANGLE,SN	
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark

V-729EG ONLY (Compared with V-729B)

-PACKING PARTS-

A701	BY634212	AC69-50913Z	AC69-50913Z	PACKING CASE;V-729EG,-,-,428,-
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685
UT01	BY634133	AC59-00005F	AC59-00005F	REMOCON-ASSY;-,VT-209F,-,45KEY,V-729EG,-
Y101	BY634155	AC68-00160A	AC68-00160A	MANUAL-USERS;V-729EG,MOJO100,-, ,ENG,-

-INSTRUMENT PARTS-

1	BY730406	AC97-00122D	AC97-00122D	ASSY-PANEL FRONT;V-729EG/TSB,HIPS94HB,87
21	BY730332	AC64-52175F	AC64-52175F	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V
101	BY730314	AC64-30899D	AC64-30899D	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730220	AC61-11061B	AC61-11061B	CONNECTOR BOARD-ASSY;V-629G/TSB,HIPS94,H

-MECHANICAL PARTS-

SAME AS V-729B

-ELECTRICAL PARTS-

601	BY630067	AC92-00049A	AC92-00049A	ASSY-PCB-MAIN;V-729EG/TSB,2S VFD-A 99T
702	BY630078	AC92-00091A	AC92-00091A	ASSY-PCB-SUB;V-729EG/TSB,CBC2
<INTERGRATED CIRCUITS>				
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST
<TRANSISTORS>				
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q802			Not used	
Q803			Not used	
Q804			Not used	
<DIODES>				
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D
ZD801			Not used	
<INDUCTORS>				
L701	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM
L702	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM
<CAPACITORS>				
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5
C6B07	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1
C6B08	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C802	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C804	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C806	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C811	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP
C812	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C813	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP
C841			Not used	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R344	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W107	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
<MISCELLANEOUS>					
JK701	BY634045	AC37-22002H	AC37-22002H	JACK-PIN;3.2mm,DPSE-9826,3P,10mm,ARREY	

V-719EG ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634204	AC69-50913R	AC69-50913R	PACKING CASE;V-719EG,-,-,428,-	
UT01	BY634134	AC59-00005G	AC59-00005G	REMOCON-ASSY;-,VT-209B,-,45KEY,V-719EG,-	
Y101	BY634155	AC68-00160A	AC68-00160A	MANUAL-USERS;V-729EG,MOJO100,-, ,ENG,-	

-INSTRUMENT PARTS-

1	BY730407	AC97-00122E	AC97-00122E	ASSY-PANEL FRONT;V-719EG/TSB,HIPS94HB,GR	
21	BY730333	AC64-52175G	AC64-52175G	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V	
101	BY730314	AC64-30899D	AC64-30899D	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730220	AC61-11061B	AC61-11061B	CONNECTOR BOARD-ASSY;V-629G/TSB,HIPS94,H	

-MECHANICAL PARTS-

SAME AS V-729B

-ELECTRICAL PARTS-

601	BY630076	AC92-00058A	AC92-00058A	ASSY-PCB-MAIN;V-719EG/TSB,2S VFD 99T	
701	BY630081	AC93-10866X	AC93-10866X	ASSY-F/TIMER;COBRA-PAL,VFD	
702			Not used		
<INTERGRATED CIRCUITS>					
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q802			Not used		
Q803			Not used		
Q804			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C802	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C804	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C806	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C811	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C812	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C813	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
<MISCELLANEOUS>					
SAME AS V-709B					

V-429EG ONLY (Compared with V-729B)

-PACKING PARTS-

A701	BY634195	AC69-50913F	AC69-50913F	PACKING CASE;V-429EG,-,-,428,-
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685
UT01	BY634135	AC59-00005H	AC59-00005H	REMOCON-ASSY;-,VT-209W,-,45KEY,V-429EG,-
Y101	BY634156	AC68-00161A	AC68-00161A	MANUAL-USERS;V-429EG/229EG,MOJO100,-, ,G

-INSTRUMENT PARTS-

1	BY730427	AC98-12106D	AC98-12106D	ASSY-PANEL FRONT;V-429EG/TSB,HIPS94HB BL
21	BY730321	AC64-52160K	AC64-52160K	DOOR-CASSETTE;V-429EG,ABS,94HB,T2.5,-,BL
101	BY730314	AC64-30899D	AC64-30899D	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730223	AC61-11061E	AC61-11061E	CONNECTOR BOARD-ASSY;V-429G/TSB,HIPS94,H

-MECHANICAL PARTS-

G001	BY730385	AC96-10481J	AC96-10481J	ASSY-CYLINDER;CX-9,PAL 4HD

-ELECTRICAL PARTS-

601	BY630068	AC92-00050A	AC92-00050A	ASSY-PCB-MAIN;V-429EG/TSB,2S VFD-A 99T
602			Not used	
<INTERGRATED CIRCUITS>				
IC4N01			Not used	
IC501			Not used	
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST
<TRANSISTORS>				
Q1P103			Not used	
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q3D01			Not used	
Q3D02			Not used	
Q3D03			Not used	
Q802			Not used	
Q803			Not used	
Q805			Not used	
<DIODES>				
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
D4N01			Not used		
D4N02			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
C509			Not used		
C510			Not used		
C511			Not used		
C512			Not used		
C513			Not used		
C514			Not used		
C515			Not used		
C516			Not used		
C517			Not used		
C518			Not used		
C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C832			Not used		
C833			Not used		
C838			Not used		
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A27			Not used		
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		
V-229EG ONLY (Compared with V-709B)					
-PACKING PARTS-					
A701	BY634199	AC69-50913K	AC69-50913K	PACKING CASE;V-229EG,-,-,428,-	
UT01	BY634136	AC59-00005J	AC59-00005J	REMOCON-ASSY;-,VT-429B,-,45KEY,V-229EG,-	
Y101	BY634156	AC68-00161A	AC68-00161A	MANUAL-USERS;V-429EG/229EG,MOJO100,-, ,G	
-INSTRUMENT PARTS-					
1	BY730431	AC98-12106H	AC98-12106H	ASSY-PANEL FRONT;V-229EG/TSB,HIPS94HB BL	
21	BY730325	AC64-52160P	AC64-52160P	DOOR-CASSETTE;V-229EG,ABS,94HB,T2.5,-,BL	
101	BY730314	AC64-30899D	AC64-30899D	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730223	AC61-11061E	AC61-11061E	CONNECTOR BOARD-ASSY;V-429G/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-	
-ELECTRICAL PARTS-					
601	BY630069	AC92-00051A	AC92-00051A	ASSY-PCB-MAIN;V-229EG/TSB,2S VFD-A 99T	
602			Not used		
702			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P103			Not used		
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q802			Not used		
Q803			Not used		
Q805			Not used		
Q6B01			Not used		
Q6B02			Not used		
Q6B03			Not used		
Q6B04			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
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C525			Not used		
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C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V Y5V	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R324	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R343			Not used		
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
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R504			Not used		
R505			Not used		
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R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		
V-219EG ONLY (Compared with V-709B)					
-PACKING PARTS-					
A701	BY634205	AC69-50913S	AC69-50913S	PACKING CASE;V-219EG,-,-,428,-	
UT01	BY634137	AC59-00005K	AC59-00005K	REMOCON-ASSY;-,VT-429G,-,45KEY,V-219EG,-	
Y101	BY634156	AC68-00161A	AC68-00161A	MANUAL-USERS;V-429EG/229EG,MOJO100,-, ,G	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
-INSTRUMENT PARTS-					
1	BY730408	AC97-00122F	AC97-00122F	ASSY-PANEL FRONT;V-219EG/TSB,HIPS94HB,GR	
21	BY730334	AC64-52175H	AC64-52175H	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V	
101	BY730314	AC64-30899D	AC64-30899D	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730223	AC61-11061E	AC61-11061E	CONNECTOR BOARD-ASSY;V-429G/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-	
-ELECTRICAL PARTS-					
601	BY630070	AC92-00052A	AC92-00052A	ASSY-PCB-MAIN;V-219EG/TSB,2S VFD 99T	
602			Not used		
702			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P103			Not used		
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q802			Not used		
Q803			Not used		
Q805			Not used		
Q6B01			Not used		
Q6B02			Not used		
Q6B03			Not used		
Q6B04			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
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C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532					
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R324	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R343			Not used		
R3A27			Not used		
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		

V-209EG ONLY (Compared with V-709B)

-PACKING PARTS-					
A701	BY634202	AC69-50913N	AC69-50913N	PACKING CASE;V-209EG,-,-,428,-	
UT01	BY634138	AC59-00005L	AC59-00005L	REMOCON-ASSY;-,VT-429F,-,45KEY,VT-209EG,	
Y101	BY634157	AC68-00162A	AC68-00162A	MANUAL-USERS;V-719EG,MOJO100,-, ,GER,-	
-INSTRUMENT PARTS-					
1	BY730434	AC98-12106L	AC98-12106L	ASSY-PANEL FRONT;V-209EG/TSB,HIPS94HB BL	
21	BY730328	AC64-52160S	AC64-52160S	DOOR-CASSETTE;V-209EG,ABS,94HB,T2.5,-,BL	
101	BY730314	AC64-30899D	AC64-30899D	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730223	AC61-11061E	AC61-11061E	CONNECTOR BOARD-ASSY;V-429G/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-	
-ELECTRICAL PARTS-					
601	BY630077	AC92-00059A	AC92-00059A	ASSY-PCB-MAIN;V-209EG/TSB,2S VFD 99T	
602			Not used		
702			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P103			Not used		
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
Q802			Not used		
Q803			Not used		
Q805			Not used		
Q6B01			Not used		
Q6B02			Not used		
Q6B03			Not used		
Q6B04			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
C509			Not used		
C510			Not used		
C511			Not used		
C512			Not used		
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C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R324	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R343			Not used		
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		

V-729F ONLY (Compared with V-729B)

-PACKING PARTS-

A701	BY634206	AC69-50913T	AC69-50913T	PACKING CASE;V-729F,-,-,428,-
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685
UT01	BY634139	AC59-00005M	AC59-00005M	REMOCON-ASSY;-,VT-429W,-,45KEY,V-729F,-
Y101	BY634158	AC68-00165A	AC68-00165A	MANUAL-USERS;V-729F,MOJO100,-, ,FRA,-

-INSTRUMENT PARTS-

1	BY730409	AC97-00122G	AC97-00122G	ASSY-PANEL FRONT;V-729F/TSB,HIPS94HB,SIL
21	BY730335	AC64-52175J	AC64-52175J	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730219	AC61-11061A	AC61-11061A	CONNECTOR BOARD-ASSY;SV-C140F,HIPS94,HB,

-MECHANICAL PARTS-

G001	BY730400	AC96-10483T	AC96-10483T	ASSY-CYLINDER;CX-9,SECAM 6HD

-ELECTRICAL PARTS-

601	BY630071	AC92-00053A	AC92-00053A	ASSY-PCB-MAIN;V-729F/TSB,2S VFD-A 99T
702	BY630078	AC92-00091A	AC92-00091A	ASSY-PCB-SUB;V-729EG/TSB,CBC2
<INTERGRATED CIRCUITS>				
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC3S01	BY631062	1204-001437	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST
<TRANSISTORS>				
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q3S01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T
Q3S02	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q3S03	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q3S04	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q3S05	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q802			Not used	
Q803			Not used	
Q804			Not used	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3S02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
L3S01	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3S02	70795863	2702-000179	62427-812-689	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	70795843	2701-000195	62427-010-293	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	
L701	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L702	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S01	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C3S02	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C3S03	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S06	70795363	2202-000791	61407-117-154	C-CERAMIC,MLC-AXIAL;150pF,10%,50V,Y5P,TP	
C3S07	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S09	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S11	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S13	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S19	70795070	2201-000376	61407-101-440	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C3S20	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	BY130259	2201-000854	2201-000854	C-CERAMIC,DISC;51pF,5%,50V,CH,TP,6.5x3,5	
C3S25	70693215	2202-000787	61407-117-100	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
C3S27	70693237	2202-000825	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
C608	BY130131	2401-002259	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C6B07	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B08	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C802	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C804	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C806	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C811	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C812	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C813	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R303	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R344	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S01	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R3S02	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S03	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S04	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S05	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S11	70795045	2001-000837	61048-177-513	R-CARBON;51Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S12	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R3S13	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S14	70795051	2001-000890	61048-177-682	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,-	
R3S15	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S16	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R3S17	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S20	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S21	70795034	2001-000674	61048-177-361	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S22	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3S23	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S24	70795015	2001-000356	61048-177-154	R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S27	70795318	2001-000319	61048-177-124	R-CARBON;120Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R602	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W107	70795004	2001-000281	61048-177-101	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
<MISCELLANEOUS>					
JK701	BY634045	AC37-22002H	AC37-22002H	JACK-PIN;3.2mm,DPSE-9826,3P,10mm,ARREY	
TM401	BY630052	AC40-30072F	AC40-30072F	TM-BLOCK;TCMM0601PD08A,SECAM-L/G/I/K,181	

V-609F ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634193	AC69-50913D	AC69-50913D	PACKING CASE;V-609F,-,-,428,-	
UT01	BY634140	AC59-00005N	AC59-00005N	REMOCON-ASSY;-,VT-609F,-,45KEY,V-609F,-	
Y101	BY634160	AC68-00167A	AC68-00167A	MANUAL-USERS;V-609F,MOJO100,-, ,FRA,-	

-INSTRUMENT PARTS-

1	BY730425	AC98-12106B	AC98-12106B	ASSY-PANEL FRONT;V-609F/TSB,HIPS94HB BLK	
21	BY730319	AC64-52160H	AC64-52160H	DOOR-CASSETTE;V-629F,ABS,94HB,T2.5,-,BLK	
101	BY730313	AC64-30899C	AC64-30899C	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730219	AC61-11061A	AC61-11061A	CONNECTOR BOARD-ASSY;SV-C140F,HIPS94,HB,	

-MECHANICAL PARTS-

G001	BY730400	AC96-10483T	AC96-10483T	ASSY-CYLINDER;CX-9,SECAM 6HD	

-ELECTRICAL PARTS-

601	BY630072	AC92-00054A	AC92-00054A	ASSY-PCB-MAIN;V-609F/TSB,2S VFD 99T	
<INTERGRATED CIRCUITS>					
IC3S01	BY631062	1204-001437	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,	
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3S01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3S02	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S03	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3S04	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S05	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q802			Not used		
Q803			Not used		
Q804			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3S02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
L3S01	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3S02	70795863	2702-000179	62427-812-689	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	70795843	2701-000195	62427-010-293	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3S01	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C3S02	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C3S03	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S06	70795363	2202-000791	61407-117-154	C-CERAMIC,MLC-AXIAL;150pF,10%,50V,Y5P,TP	
C3S07	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S09	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S11	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S13	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S19	70795070	2201-000376	61407-101-440	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C3S20	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	BY130259	2201-000854	2201-000854	C-CERAMIC,DISC;51pF,5%,50V,CH,TP,6.5x3,5	
C3S25	70693215	2202-000787	61407-117-100	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
C3S27	70693237	2202-000825	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
C608	BY130131	2401-002259	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C802	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C804	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C806	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C811	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C812	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C813	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
C6P06			Not used		
C6P07			Not used		
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP	
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1	
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R303	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R3S01	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S02	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R3S03	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S04	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S05	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S11	70795045	2001-000837	61048-177-513	R-CARBON;51Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S12	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R3S13	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S14	70795051	2001-000890	61048-177-682	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,-	
R3S15	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S16	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R3S17	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S20	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S21	70795034	2001-000674	61048-177-361	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S22	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3S23	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S24	70795015	2001-000356	61048-177-154	R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S27	70795318	2001-000319	61048-177-124	R-CARBON;120Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R602	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P06			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P09	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
<MISCELLANEOUS>					
TM401	BY630052	AC40-30072F	AC40-30072F	TM-BLOCK;TCMM0601PD08A,SECAM-L/G/I/K,181	

V-429F ONLY (Compared with V-729B)

-PACKING PARTS-

A701	BY634196	AC69-50913G	AC69-50913G	PACKING CASE;V-429F,-,-,428,-
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685
UT01	BY634141	AC59-00005P	AC59-00005P	REMOCON-ASSY;-,VT-429F,-,45KEY,V-429F,41
Y101	BY634159	AC68-00166A	AC68-00166A	MANUAL-USERS;V-429F/229F,MOJO100,-, ,FRA

-INSTRUMENT PARTS-

1	BY730428	AC98-12106E	AC98-12106E	ASSY-PANEL FRONT;V-429F/TSB,HIPS94HB BLK
21	BY730322	AC64-52160L	AC64-52160L	DOOR-CASSETTE;V-429F,ABS,94HB,T2.5,-,BLK
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730222	AC61-11061D	AC61-11061D	CONNECTOR BOARD-ASSY;V-629B/TSB,HIPS94,H

-MECHANICAL PARTS-

G001	BY730399	AC96-10483R	AC96-10483R	ASSY-CYLINDER;CX-9,SECAM 4HD

-ELECTRICAL PARTS-

601	BY630084	AC93-10867K	AC93-10867K	ASSY-MAIN;SV-429F/TSB,COBRA PAL B/G,D/K,
602			Not used	
701	BY630031	AC92-00165A	AC92-00165A	ASSY-OPT PCB-MAIN;VFD-AVLINK(MVT),TSB PA
702	BY630079	AC92-00101A	AC92-00101A	ASSY-PCB-SUB;V-429F/TSB,CBC3
<INTERGRATED CIRCUITS>				
IC3S01	BY631062	1204-001437	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,
IC4N01			Not used	
IC501			Not used	
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST
<TRANSISTORS>				
Q1P103			Not used	
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q3D01			Not used	
Q3D02			Not used	
Q3D03			Not used	
Q3S01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T
Q3S02	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q3S03	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
Q3S04	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S05	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q6B01			Not used		
Q6B02			Not used		
Q6B03			Not used		
Q6B04			Not used		
Q802			Not used		
Q803			Not used		
Q804			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3S02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
LD6B01			Not used		
LD701			Not used		
LD702			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L3S01	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3S02	70795863	2702-000179	62427-812-689	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	70795843	2701-000195	62427-010-293	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L6B01			Not used		
L701	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C3S01	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C3S02	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C3S03	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S06	70795363	2202-000791	61407-117-154	C-CERAMIC,MLC-AXIAL;150pF,10%,50V,Y5P,TP	
C3S07	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S09	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S11	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S13	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S19	70795070	2201-000376	61407-101-440	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C3S20	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	BY130259	2201-000854	2201-000854	C-CERAMIC,DISC;51pF,5%,50V,CH,TP,6.5x3,5	
C3S25	70693215	2202-000787	61407-117-100	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
C3S27	70693237	2202-000825	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
C509			Not used		
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C514			Not used		
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C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C608	BY130131	2401-002259	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C6B01			Not used		
C6B02			Not used		
C6B03			Not used		
C6B04			Not used		
C6B07	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B08	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B09			Not used		
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R303	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R344	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A29	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A33	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R3S01	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S02	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S03	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S04	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S05	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S11	70795045	2001-000837	61048-177-513	R-CARBON;51Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S12	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R3S13	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S14	70795051	2001-000890	61048-177-682	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,-	
R3S15	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S16	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R3S17	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S20	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S21	70795034	2001-000674	61048-177-361	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S22	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3S23	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S24	70795015	2001-000356	61048-177-154	R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S27	70795318	2001-000319	61048-177-124	R-CARBON;120Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R602	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6B01			Not used		
R6B02			Not used		
R6B03			Not used		
R6B10			Not used		
R6B11			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R732			Not used		
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W107	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JK701	BY634122	AC37-22002S	AC37-22002S	JACK;3.2mm,DPSM-9827,2P,10mm,ARREY	
JC802			Not used		
TM401	BY630052	AC40-30072F	AC40-30072F	TM-BLOCK;TCMM0601PD08A,SECAM-L/G/I/K,181	
XT4N01			Not used		

V-419F ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634208	AC69-50913V	AC69-50913V	PACKING CASE;V-419F,-,-,428,-
UT01	BY634141	AC59-00005P	AC59-00005P	REMOCON-ASSY;-,VT-429F,-,45KEY,V-429F,41
Y101	BY634161	AC68-00168A	AC68-00168A	MANUAL-USERS;V-409F/219F,MOJO100,-, ,FRA

-INSTRUMENT PARTS-

1	BY730411	AC97-00122J	AC97-00122J	ASSY-PANEL FRONT;V-419F/TSB,HIPS94HB,SIL
21	BY730337	AC64-52175L	AC64-52175L	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V
101	BY730313	AC64-30899C	AC64-30899C	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730222	AC61-11061D	AC61-11061D	CONNECTOR BOARD-ASSY;V-629B/TSB,HIPS94,H

-MECHANICAL PARTS-

G001	BY730399	AC96-10483R	AC96-10483R	ASSY-CYLINDER;CX-9,SECAM 4HD

-ELECTRICAL PARTS-

601	BY630073	AC92-00055A	AC92-00055A	ASSY-PCB-MAIN;V-409F/TSB,2S VFD 99T
602			Not used	
<INTERGRATED CIRCUITS>				
IC3S01	BY631062	1204-001437	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,
IC4N01			Not used	
IC501			Not used	
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST
<TRANSISTORS>				
Q1P103			Not used	
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q3D01			Not used	
Q3D02			Not used	
Q3D03			Not used	
Q3S01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T
Q3S02	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q3S03	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q3S04	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q3S05	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T
Q802			Not used	
Q803			Not used	
Q804			Not used	
<DIODES>				
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D3S02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D4N01			Not used	
D4N02			Not used	
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D
ZD801			Not used	
<INDUCTORS>				
FL3D01			Not used	
L3D01			Not used	
L3S01	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm
L3S02	70795863	2702-000179	62427-812-689	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm
L3S03	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm
L3S04	70795843	2701-000195	62427-010-293	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM
L402			Not used	
L4N01			Not used	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L6B01			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C3S01	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C3S02	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C3S03	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S06	70795363	2202-000791	61407-117-154	C-CERAMIC,MLC-AXIAL;150pF,10%,50V,Y5P,TP	
C3S07	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S09	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S11	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S13	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S19	70795070	2201-000376	61407-101-440	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C3S20	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	BY130259	2201-000854	2201-000854	C-CERAMIC,DISC;51pF,5%,50V,CH,TP,6.5x3,5	
C3S25	70693215	2202-000787	61407-117-100	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
C3S27	70693237	2202-000825	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
C509			Not used		
C510			Not used		
C511			Not used		
C512			Not used		
C513			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C514			Not used		
C515			Not used		
C516			Not used		
C517			Not used		
C518			Not used		
C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C608	BY130131	2401-002259	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C6P06			Not used		
C6P07			Not used		
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP	
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1	
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R303	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R3S01	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S02	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S03	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S04	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S05	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S11	70795045	2001-000837	61048-177-513	R-CARBON;51Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S12	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R3S13	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S14	70795051	2001-000890	61048-177-682	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,-	
R3S15	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S16	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R3S17	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S20	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S21	70795034	2001-000674	61048-177-361	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S22	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3S23	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S24	70795015	2001-000356	61048-177-154	R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S27	70795318	2001-000319	61048-177-124	R-CARBON;120Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
R516			Not used		
R517			Not used		
R518			Not used		
R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R602	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P06			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;2000HM,5%,1/8W,AA,TP,-	
R6P09	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630052	AC40-30072F	AC40-30072F	TM-BLOCK;TCMM0601PD08A,SECAM-L/G/I/K,181	
XT4N01			Not used		
V-229F ONLY (Compared with V-729B)					
-PACKING PARTS-					
A701	BY634200	AC69-50913L	AC69-50913L	PACKING CASE;V-229F,-,-,428,-	
A702	BY730125	AC69-20362A	AC69-20362A	CUSHION-F/B;M-685,EPS 58,-,-,-,-,M-685	
UT01	BY634142	AC59-00005Q	AC59-00005Q	REMOCON-ASSY;-,VT-219F,-,45KEY,V-219F,-	
Y101	BY634159	AC68-00166A	AC68-00166A	MANUAL-USERS;V-429F/229F,MOJO100,-, ,FRA	
-INSTRUMENT PARTS-					
1	BY730432	AC98-12106J	AC98-12106J	ASSY-PANEL FRONT;V-229F/TSB,HIPS94HB BLK	
21	BY730326	AC64-52160Q	AC64-52160Q	DOOR-CASSETTE;V-229F,ABS,94HB,T2.5,-,BLK	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730222	AC61-11061D	AC61-11061D	CONNECTOR BOARD-ASSY;V-629B/TSB,HIPS94,H	
-MECHANICAL PARTS-					
G001	BY730384	AC96-10481G	AC96-10481G	ASSY-CYLINDER;CX-9,PAL 2HD	
-ELECTRICAL PARTS-					
601	BY630085	AC93-10867L	AC93-10867L	ASSY-MAIN;SV-229F/TSB,COBRA PAL B/G,D/K,	
602			Not used		
701	BY630031	AC92-00165A	AC92-00165A	ASSY-OPT PCB-MAIN;VFD-AVLINK(MVT),TSB PA	
702	BY630079	AC92-00101A	AC92-00101A	ASSY-PCB-SUB;V-429F/TSB,CBC3	
<INTERGRATED CIRCUITS>					
IC3S01	BY631062	1204-001437	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
IC4N01			Not used		
IC501			Not used		
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P103			Not used		
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q310			Not used		
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q3S01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3S02	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S03	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3S04	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S05	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q6B01			Not used		
Q6B02			Not used		
Q6B03			Not used		
Q6B04			Not used		
Q802			Not used		
Q803			Not used		
Q804			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3S02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
LD6B01			Not used		
LD701			Not used		
LD702					
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L3S01	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3S02	70795863	2702-000179	62427-812-689	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	70795843	2701-000195	62427-010-293	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L6B01			Not used		
L701	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C3S01	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C3S02	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C3S03	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S06	70795363	2202-000791	61407-117-154	C-CERAMIC,MLC-AXIAL;150pF,10%,50V,Y5P,TP	
C3S07	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C3S09	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S11	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S13	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S19	70795070	2201-000376	61407-101-440	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C3S20	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	BY130259	2201-000854	2201-000854	C-CERAMIC,DISC;51pF,5%,50V,CH,TP,6.5x3,5	
C3S25	70693215	2202-000787	61407-117-100	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
C3S27	70693237	2202-000825	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
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C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C608	BY130131	2401-002259	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C6B01			Not used		
C6B02			Not used		
C6B03			Not used		
C6B04			Not used		
C6B07	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B08	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C6B09			Not used		
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R303	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R343			Not used		
R344	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A29	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A33	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R3S01	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S02	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S03	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S04	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S05	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S11	70795045	2001-000837	61048-177-513	R-CARBON;51Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S12	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R3S13	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S14	70795051	2001-000890	61048-177-682	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,-	
R3S15	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S16	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R3S17	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S20	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S21	70795034	2001-000674	61048-177-361	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S22	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3S23	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S24	70795015	2001-000356	61048-177-154	R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S27	70795318	2001-000319	61048-177-124	R-CARBON;120Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R4N01			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
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R523			Not used		
R524			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R602	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6B01			Not used		
R6B02			Not used		
R6B03			Not used		
R6B10			Not used		
R6B11			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R732			Not used		
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W107	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JK701	BY634122	AC37-22002S	AC37-22002S	JACK;3.2mm,DPSM-9827,2P,10mm,ARREY	
JC802			Not used		
TM401	BY630052	AC40-30072F	AC40-30072F	TM-BLOCK;TCMM0601PD08A,SECAM-L/G/I/K,181	
XT4N01			Not used		

V-219F ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634207	AC69-50913U	AC69-50913U	PACKING CASE;V-219F,-,-,428,-	
UT01	BY634142	AC59-00005Q	AC59-00005Q	REMOCON-ASSY;-,VT-219F,-,45KEY,V-219F,-	
Y101	BY634161	AC68-00168A	AC68-00168A	MANUAL-USERS;V-409F/219F,MOJO100,-, ,FRA	

-INSTRUMENT PARTS-

1	BY730410	AC97-00122H	AC97-00122H	ASSY-PANEL FRONT;V-219F/TSB,HIPS94HB,SIL	
21	BY730336	AC64-52175K	AC64-52175K	DOOR-CASSETTE;-,ABS94HB,-,T2.5,-,BLK,-,V	
101	BY730313	AC64-30899C	AC64-30899C	CABINET-TOP-ASSY;-,PCM(SECC),-,0.525,380	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730222	AC61-11061D	AC61-11061D	CONNECTOR BOARD-ASSY;V-629B/TSB,HIPS94,H	

-MECHANICAL PARTS-

G001	BY730384	AC96-10481G	AC96-10481G	ASSY-CYLINDER;CX-9,PAL 2HD	

-ELECTRICAL PARTS-

601	BY630074	AC92-00056A	AC92-00056A	ASSY-PCB-MAIN;V-219F/TSB,2S VFD 99T	
602			Not used		
<INTERGRATED CIRCUITS>					
IC3S01	BY631062	1204-001437	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,	
IC4N01			Not used		
IC501			Not used		
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P103			Not used		
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q3S01	70795134	0501-000303	A4050-0007	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3S02	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S03	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3S04	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S05	70795136	0501-000398	A4050-0026	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q802			Not used		
Q803			Not used		
Q804			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D3S02	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		
L3D01			Not used		
L3S01	70796003	2702-000106	62427-813-101	INDUCTOR-RADIAL;100uH,5%,6.2x7.4mm	
L3S02	70795863	2702-000179	62427-812-689	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	BY330052	2701-000165	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	70795843	2701-000195	62427-010-293	INDUCTOR-AXIAL;47UH,5%,2.4X3.4MM	
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L6B01			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C3S01	70697011	2202-000164	61407-117-184	C-CERAMIC,MLC-AXIAL;.18NF,10%,50V,Y5P,TP	
C3S02	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C3S03	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S04	70796389	2301-000381	B1102-0277	C-FILM,PEF;10nF,5%,50V,TP,6.5x5.5x3mm,5m	
C3S05	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S06	70795363	2202-000791	61407-117-154	C-CERAMIC,MLC-AXIAL;150pF,10%,50V,Y5P,TP	
C3S07	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3S09	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S11	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S13	BY130278	2401-001775	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	BY130262	2202-000173	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S19	70795070	2201-000376	61407-101-440	C-CERAMIC,DISC;220pF,5%,50V,SL,TP,4x4,5	
C3S20	BY130082	2301-000224	2301-000224	C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm	
C3S21	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	BY130259	2201-000854	2201-000854	C-CERAMIC,DISC;51pF,5%,50V,CH,TP,6.5x3,5	
C3S25	70693215	2202-000787	61407-117-100	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
C3S27	70693237	2202-000825	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP	
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
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C510			Not used		
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C512			Not used		
C513			Not used		
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C518			Not used		
C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C608	BY130131	2401-002259	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	
C6P06			Not used		
C6P07			Not used		
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP	
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1	
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R303	70795357	2001-000258	61048-177-182	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,-	
R343			Not used		
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R3S01	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S02	70795058	2001-000977	61048-177-822	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S03	70795663	2001-001015	61048-177-912	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S04	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R3S05	70795041	2001-000786	61048-177-473	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S11	70795045	2001-000837	61048-177-513	R-CARBON;51Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S12	70795040	2001-000734	61048-177-472	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-	
R3S13	70795029	2001-000633	61048-177-303	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S14	70795051	2001-000890	61048-177-682	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,-	
R3S15	70795055	2001-000947	61048-177-752	R-CARBON;7.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S16	70699144	2001-000472	61048-177-272	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,-	
R3S17	70795021	2001-000522	61048-177-223	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S20	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S21	70795034	2001-000674	61048-177-361	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S22	70795005	2001-000429	61048-177-102	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
R3S23	70795319	2001-000539	61048-177-243	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3S24	70795015	2001-000356	61048-177-154	R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3S27	70795318	2001-000319	61048-177-124	R-CARBON;120Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
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R514			Not used		
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R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R602	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R603	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P06			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P09	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630052	AC40-30072F	AC40-30072F	TM-BLOCK;TCMM0601PD08A,SECAM-L/G/I/K,181	
XT4N01			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark

V-729W ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634192	AC69-50913C	AC69-50913C	PACKING CASE;V-729W,-,-,428,-
UT01	BY634143	AC59-00005R	AC59-00005R	REMOCON-ASSY;-,VT-729W,-,45KEY,V-729W,-
Y101	BY634081	AC68-00245A	AC68-00245A	MANUAL-USERS;V-729W,MOJO100,-, ,ITALY/SP
Y104	BY634162	AC68-00169A	AC68-00169A	MANUAL-USERS;V-729W,MOJO100,-, ,ENG/ITA/

-INSTRUMENT PARTS-

1	BY730424	AC98-12106A	AC98-12106A	ASSY-PANEL FRONT;V-729W/TSB,HIPS94HB BLK
21	BY730318	AC64-52160G	AC64-52160G	DOOR-CASSETTE;V-729W,ABS,94HB,T2.5,-,BLK
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730220	AC61-11061B	AC61-11061B	CONNECTOR BOARD-ASSY;V-629G/TSB,HIPS94,H

-MECHANICAL PARTS-

SAME AS V-729B

-ELECTRICAL PARTS-

601	BY630075	AC92-00057A	AC92-00057A	ASSY-PCB-MAIN;V-729W/TSB,2S VFD-A 99T
<INTERGRATED CIRCUITS>				
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST
<TRANSISTORS>				
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T
Q802			Not used	
Q803			Not used	
Q804			Not used	
<DIODES>				
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D
ZD801			Not used	
<INDUCTORS>				
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM
<CAPACITORS>				
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5
C312			Not used	
C360			Not used	
C3A22			Not used	
C3A31			Not used	
C6P06			Not used	
C6P07			Not used	
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C802	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C804	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C806	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C811	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP
C812	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C813	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P06			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
<MISCELLANEOUS>					
SAME AS V-709B					

V-429W ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634197	AC69-50913H	AC69-50913H	PACKING CASE;V-429W,-,-,428,-	
UT01	BY634144	AC59-00005S	AC59-00005S	REMOCON-ASSY;-,VT-429W,-,45KEY,V-429W,-	
Y101	BY634082	AC68-00247A	AC68-00247A	MANUAL-USERS;V-429W/V-209W,MOJO100,-, ,I	
Y105	BY634163	AC68-00170A	AC68-00170A	MANUAL-USERS;-,MOJO100,-, ,ENG/ITA/SPA,-	

-INSTRUMENT PARTS-

1	BY730429	AC98-12106F	AC98-12106F	ASSY-PANEL FRONT;V-429W/TSB,HIPS94HB BLK	
21	BY730323	AC64-52160M	AC64-52160M	DOOR-CASSETTE;V-429W,ABS,94HB,T2.5,-,BLK	
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	
TM401B	BY730223	AC61-11061E	AC61-11061E	CONNECTOR BOARD-ASSY;V-429G/TSB,HIPS94,H	

-MECHANICAL PARTS-

G001	BY730385	AC96-10481J	AC96-10481J	ASSY-CYLINDER;CX-9,PAL 4HD	

-ELECTRICAL PARTS-

601	BY630086	AC93-10867P	AC93-10867P	ASSY-MAIN;SV-429W/TSB,COBRA PAL B/G,D/K	
602			Not used		
<INTERGRATED CIRCUITS>					
IC4N01			Not used		
IC501			Not used		
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12	
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,	
IC801	BY631064	1205-001484	1205-001484	IC-SWITCH;LA7147M,SOP,36PIN,375MIL,PLAST	
<TRANSISTORS>					
Q1P103			Not used		
Q1P108	70795142	0501-000442	62139-301-311	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,T0-9	
Q1P113	70795818	0501-000290	62147-101-950	TR-SMALL SIGNAL;KSA643-Y,PNP,500MW,TO-92	
Q1P118	70693084	0504-000142	A4050-0224	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
Q3D01			Not used		
Q3D02			Not used		
Q3D03			Not used		
Q802			Not used		
Q803			Not used		
Q804			Not used		
<DIODES>					
D1P112	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P114	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P116	70795150	0401-000101	62169-406-482	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N01			Not used		
D4N02			Not used		
ZD1P06	BY430015	0403-001211	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
ZD801			Not used		
<INDUCTORS>					
FL3D01			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
L3D01			Not used		
L3D01			Not used		
L402			Not used		
L4N01			Not used		
L4N02			Not used		
L4N03			Not used		
L4N04			Not used		
L502			Not used		
L503			Not used		
L801	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L802	70795172	AC27-92001B	62429-833-101	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
L805	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
L806	BY330053	2701-000181	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
<CAPACITORS>					
C1P107			Not used		
C1P117	BY130042	2401-000598	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C312			Not used		
C360			Not used		
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	
C3D01			Not used		
C3D02			Not used		
C3D03			Not used		
C3D04			Not used		
C3D05			Not used		
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
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C511			Not used		
C512			Not used		
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C514			Not used		
C515			Not used		
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C518			Not used		
C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C6P06			Not used		
C6P07			Not used		
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1	
C801	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C803	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C805	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C807	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C808	BY130273	2401-000414	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C809	70795769	2401-001919	61617-408-229	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C810	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C814	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C815	BY130047	2401-002075	2401-002075	C-AL;4.7uF,20%,50V,GP,TP,5x11,5	
C817	BY130049	2401-002144	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C818	70795075	2202-000797	61407-117-104	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C819	BY130280	2401-002165	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C820	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C823	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C826	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C827	BY130069	2202-000121	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C832			Not used		
C833			Not used		
C834	BY130263	2202-000231	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP	
C838			Not used		
C840	BY130015	2401-001479	A1104-0478	C-AL;470uF,20%,10V,GP,-,-,TP	
C841			Not used		
<RESISTORS>					
R1P118	70796067	2001-000362	61048-177-151	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1P124	70795007	2001-000273	61048-177-104	R-CARBON;100KOHM,5%,1/8W,AA,TP,-	
R1P126	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A28	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R4N10			Not used		
R501			Not used		
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
R514			Not used		
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R517			Not used		
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R519			Not used		
R520			Not used		
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P06			Not used		
R6P07	70796356	2001-000490	61048-177-201	R-CARBON;200OHM,5%,1/8W,AA,TP,-	
R6P09	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R6P10	70795019	2001-000515	61048-177-221	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R801	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R802	70795004	2001-000281	61048-177-101	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R809	70795054	2001-000969	61048-177-750	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R819	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R820	70795025	2001-000554	61048-177-271	R-CARBON;270ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R823	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R824	70795026	2001-000563	61048-177-273	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
W229			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		

V-209W ONLY (Compared with V-709B)

-PACKING PARTS-

A701	BY634203	AC69-50913Q	AC69-50913Q	PACKING CASE;V-209W,-,-,428,-
UT01	BY634145	AC59-00005T	AC59-00005T	REMOCON-ASSY;-,VT-209W,-,45KEY,V-209W,V-
Y101	BY634082	AC68-00247A	AC68-00247A	MANUAL-USERS;V-429W/V-209W,MOJO100,-, ,I
Y105	BY634163	AC68-00170A	AC68-00170A	MANUAL-USERS;-,MOJO100,-, ,ENG/ITA/SPA,-

-INSTRUMENT PARTS-

1	BY730435	AC98-12106N	AC98-12106N	ASSY-PANEL FRONT;V-209W/TSB,HIPS94HB BLK
21	BY730329	AC64-52160U	AC64-52160U	DOOR-CASSETTE;V-209W,ABS,94HB,T2.5,-,BLK
200	BY634124	AC39-10019A	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K
TM401B	BY730225	AC61-11061G	AC61-11061G	CONNECTOR BOARD-ASSY;V-209B/TSB,HIPS94,H

-MECHANICAL PARTS-

G001	BY730420	AC97-00229A	AC97-00229A	ASSY-CYLINDER;CX9-S2PLB,-,-

-ELECTRICAL PARTS-

601	BY630087	AC93-10867Q	AC93-10867Q	ASSY-MAIN;SV-209W/TSB,COBRA PAL B/G,D/K
602			Not used	
<INTERGRATED CIRCUITS>				
IC4N01			Not used	
IC501			Not used	
IC601	BY631035	AC09-00024D	AC09-00024D	IC-MCU;UPD784927GF-121-3BA,100P,-,N90-12
IC6P01	BY631066	AC09-10459G	AC09-10459G	IC-MCU;LC74789M-9763,24P,MFP,OSD IC,-,-,
<TRANSISTORS>				
Q1P103			Not used	
Q310			Not used	
Q3D01			Not used	
Q3D02			Not used	
Q3D03			Not used	
Q3S02	70795138	0504-000203	62137-701-013	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-
Q803			Not used	
<DIODES>				
D4N01			Not used	
D4N02			Not used	
ZD801			Not used	
<INDUCTORS>				
FL3D01			Not used	
L3D01			Not used	
L402			Not used	
L4N01			Not used	
L4N02			Not used	
L4N03			Not used	
L4N04			Not used	
L502			Not used	
L503			Not used	
L6B01			Not used	
L811			Not used	
L812			Not used	
<CAPACITORS>				
C1P107			Not used	
C312			Not used	
C360			Not used	
C3A11	BY130145	2301-000253	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M
C3A22	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V
C3A31	BY130027	2202-002037	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V
C3D01			Not used	
C3D02			Not used	
C3D03			Not used	
C3D04			Not used	
C3D05			Not used	

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
C4N01			Not used		
C4N02			Not used		
C4N03			Not used		
C4N04			Not used		
C4N05			Not used		
C4N06			Not used		
C4N07			Not used		
C4N08			Not used		
C4N09			Not used		
C4N10			Not used		
C4N11			Not used		
C4N12			Not used		
C4N13			Not used		
C4N14			Not used		
C4N15			Not used		
C4N16			Not used		
C4N17			Not used		
C4N18			Not used		
C4N19			Not used		
C4N21			Not used		
C4N22			Not used		
C4N23			Not used		
C4N24			Not used		
C501			Not used		
C502			Not used		
C503			Not used		
C504			Not used		
C505			Not used		
C506			Not used		
C507			Not used		
C508			Not used		
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C519			Not used		
C520			Not used		
C521			Not used		
C522			Not used		
C523			Not used		
C524			Not used		
C525			Not used		
C526			Not used		
C527			Not used		
C530			Not used		
C531			Not used		
C532			Not used		
C6P06			Not used		
C6P07			Not used		
C6P09	BY130170	2202-000145	2202-000145	C-CERAMIC,MLC-AXIAL;.12NF,10%,50V,Y5P,TP	
C6P20	70795082	2202-000295	2202-000295	C-CERAMIC,MLC-AXIAL;68pF,5%,50V,SL,3.5x1	
C832			Not used		
C833			Not used		
C838			Not used		
<RESISTORS>					
R343			Not used		
R3A27	70795447	2001-000878	61048-177-622	R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R3A28	70795036	2001-000613	61048-177-392	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,-	
R3A29			Not used		
R3A31	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A32	70795038	2001-000766	61048-177-433	R-CARBON;43Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R3A33			Not used		
R3D01			Not used		
R3D02			Not used		
R3D03			Not used		
R4N01			Not used		
R4N02			Not used		
R4N03			Not used		
R4N04			Not used		
R4N05			Not used		
R4N06			Not used		
R501			Not used		

Loc.No.	TSB Parts No.	New Reference No.	Old Reference No.	Description ; Specification	Remark
R502			Not used		
R503			Not used		
R504			Not used		
R505			Not used		
R506			Not used		
R507			Not used		
R508			Not used		
R509			Not used		
R510			Not used		
R511			Not used		
R512			Not used		
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R516			Not used		
R517			Not used		
R518			Not used		
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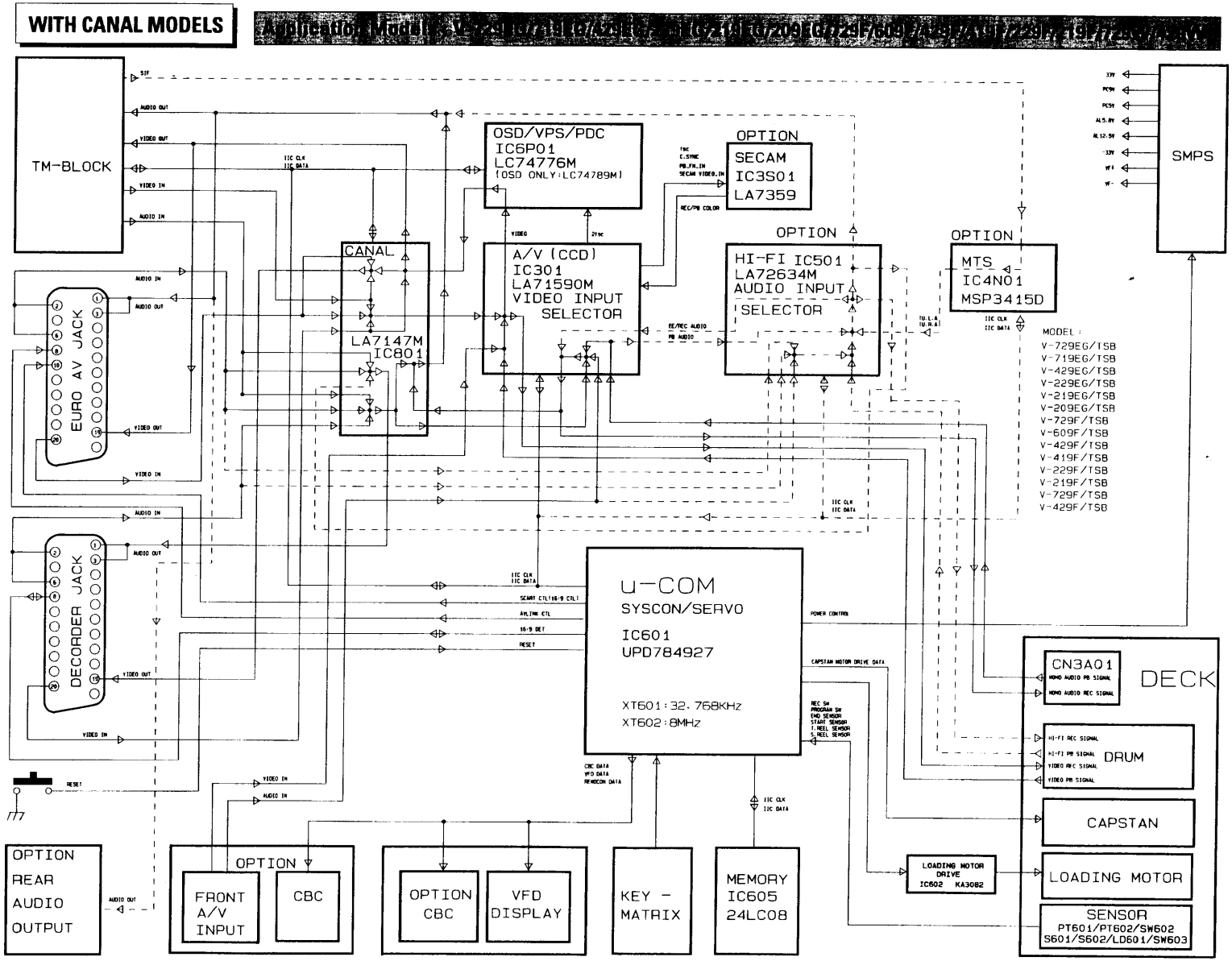
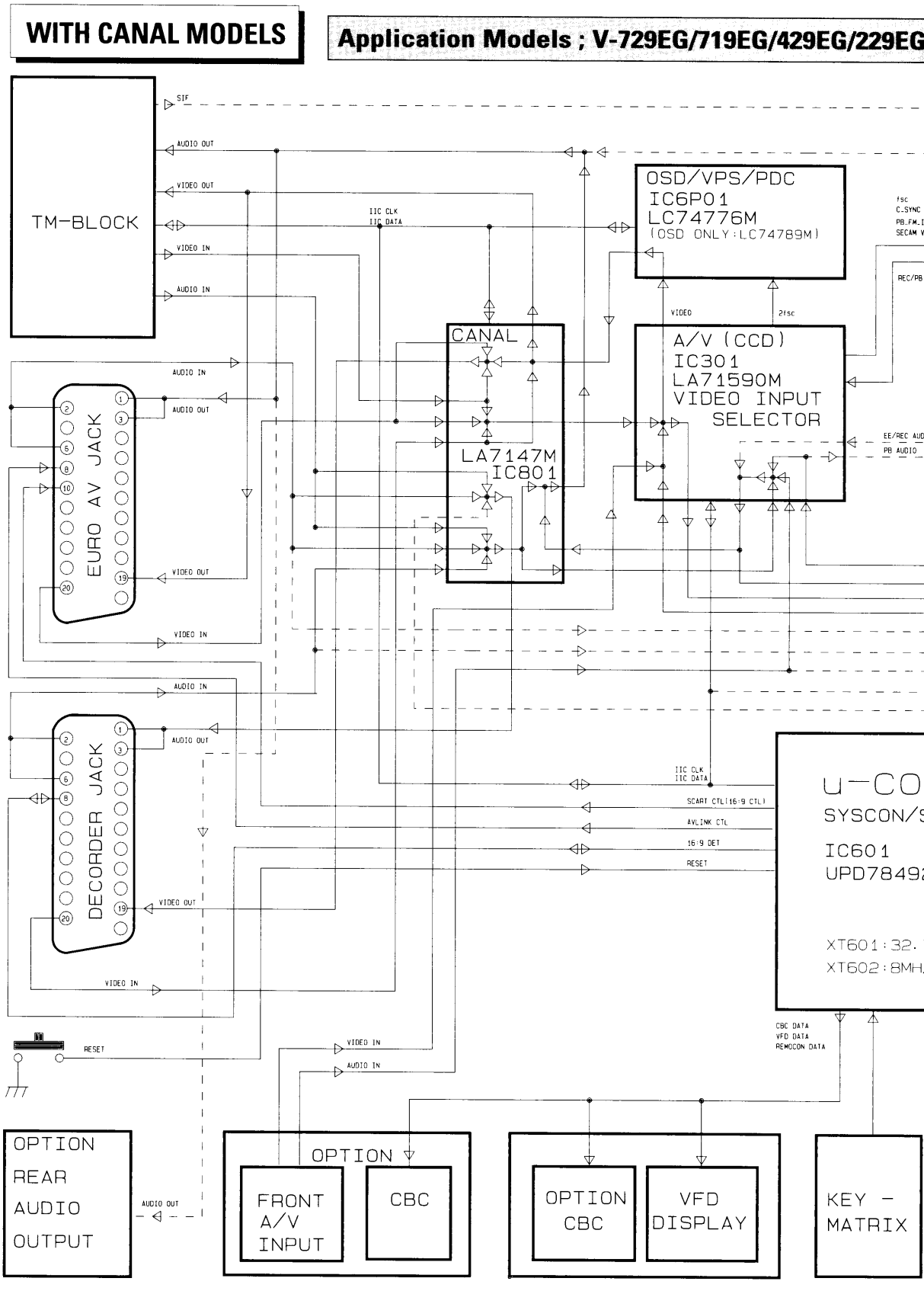
R521			Not used		
R522			Not used		
R523			Not used		
R524			Not used		
R525			Not used		
R533			Not used		
R540			Not used		
R570			Not used		
R571			Not used		
R6P01			Not used		
R6P02			Not used		
R6P03			Not used		
R6P04			Not used		
R6P06			Not used		
R6P09	70795020	2001-000449	61048-177-222	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
W229			Not used		
R4N10			Not used		
R810			Not used		
R811			Not used		
R821			Not used		
R822			Not used		
<MISCELLANEOUS>					
CN301	70796410	3708-000395	A6013-0941	CONNECTOR-FPC/FC/PIC;8P,1.25MM,STRAIGHT,	
CN4N01			Not used		
JC801	BY634114	3710-000482	3710-000482	CONNECTOR-SOCKET;21P,-,-,ANGLE,SN	
JC802			Not used		
TM401	BY630051	AC40-30072D	AC40-30072D	TM-BLOCK;TCMK0600PD08A,PAL-BG/I/DK,181C	
XT4N01			Not used		

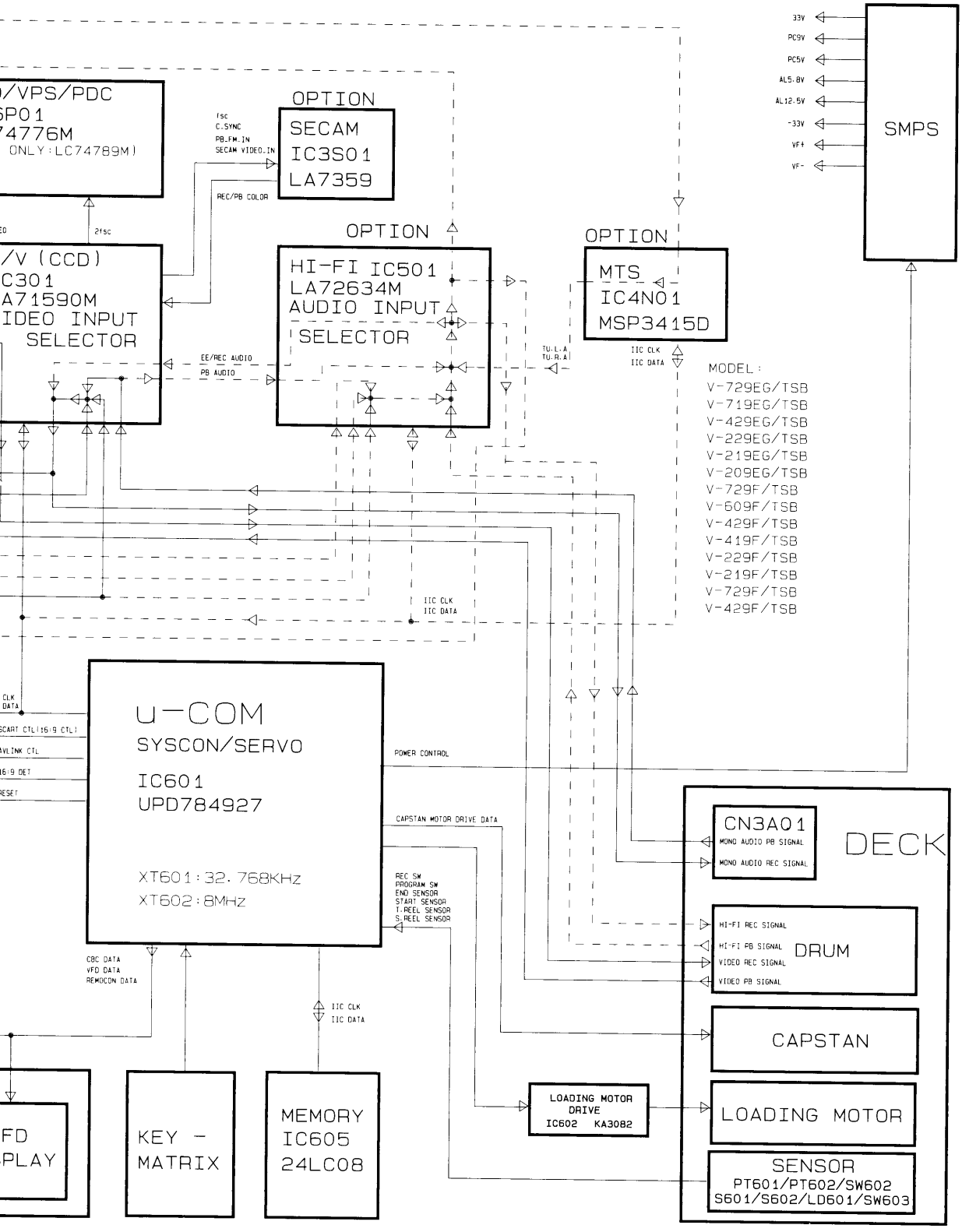
8. Block Diagrams



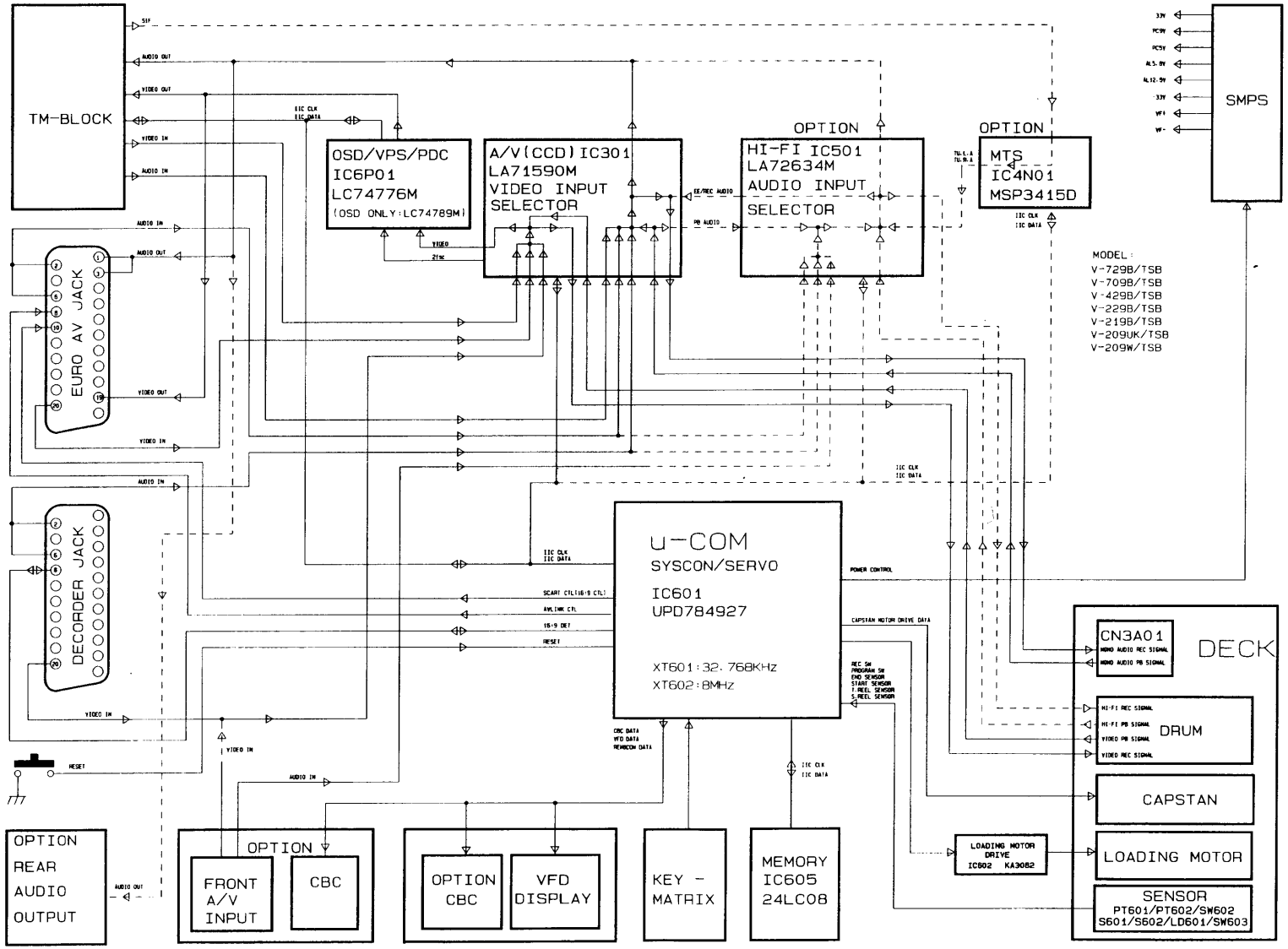
8. Block Diagrams

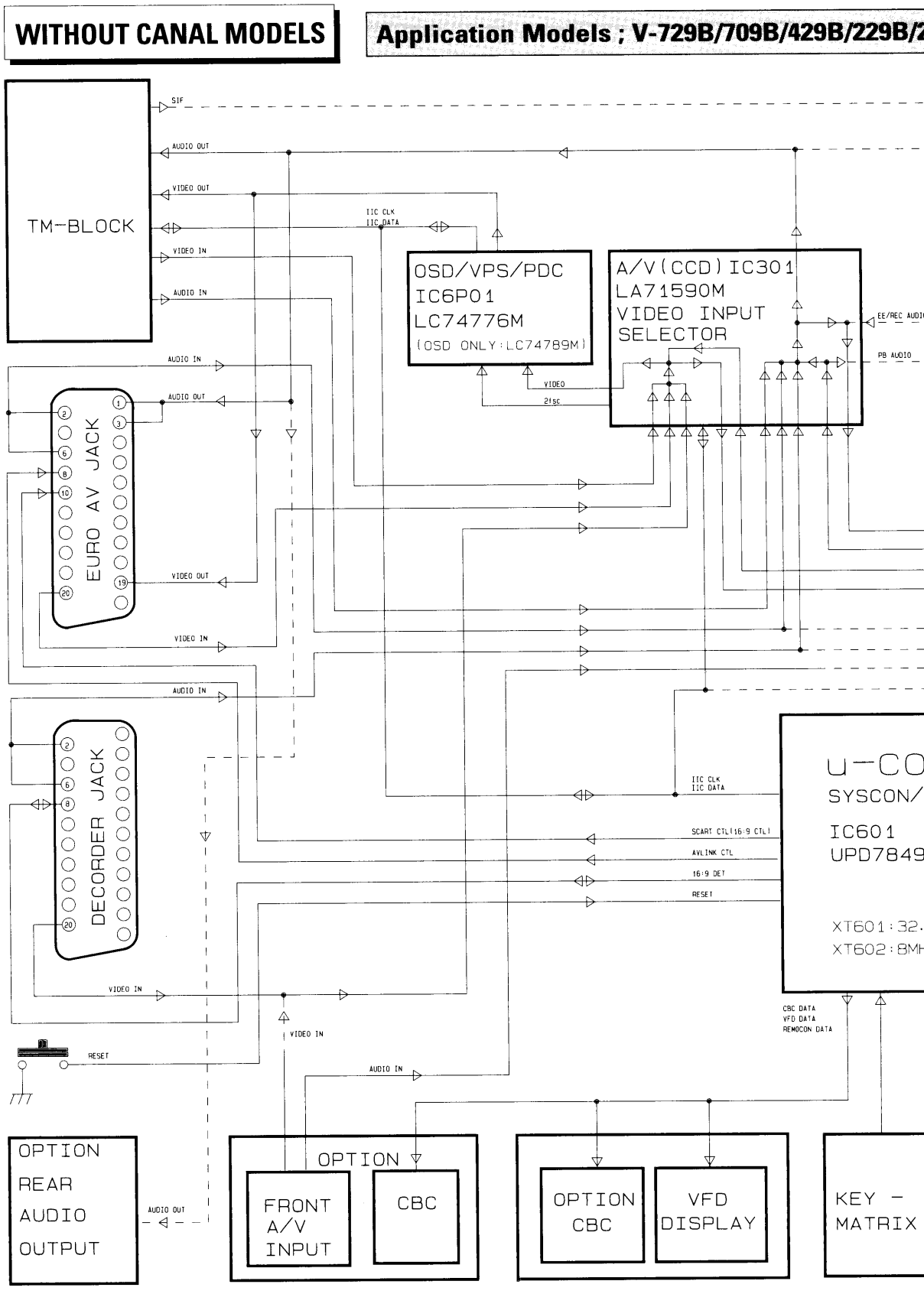


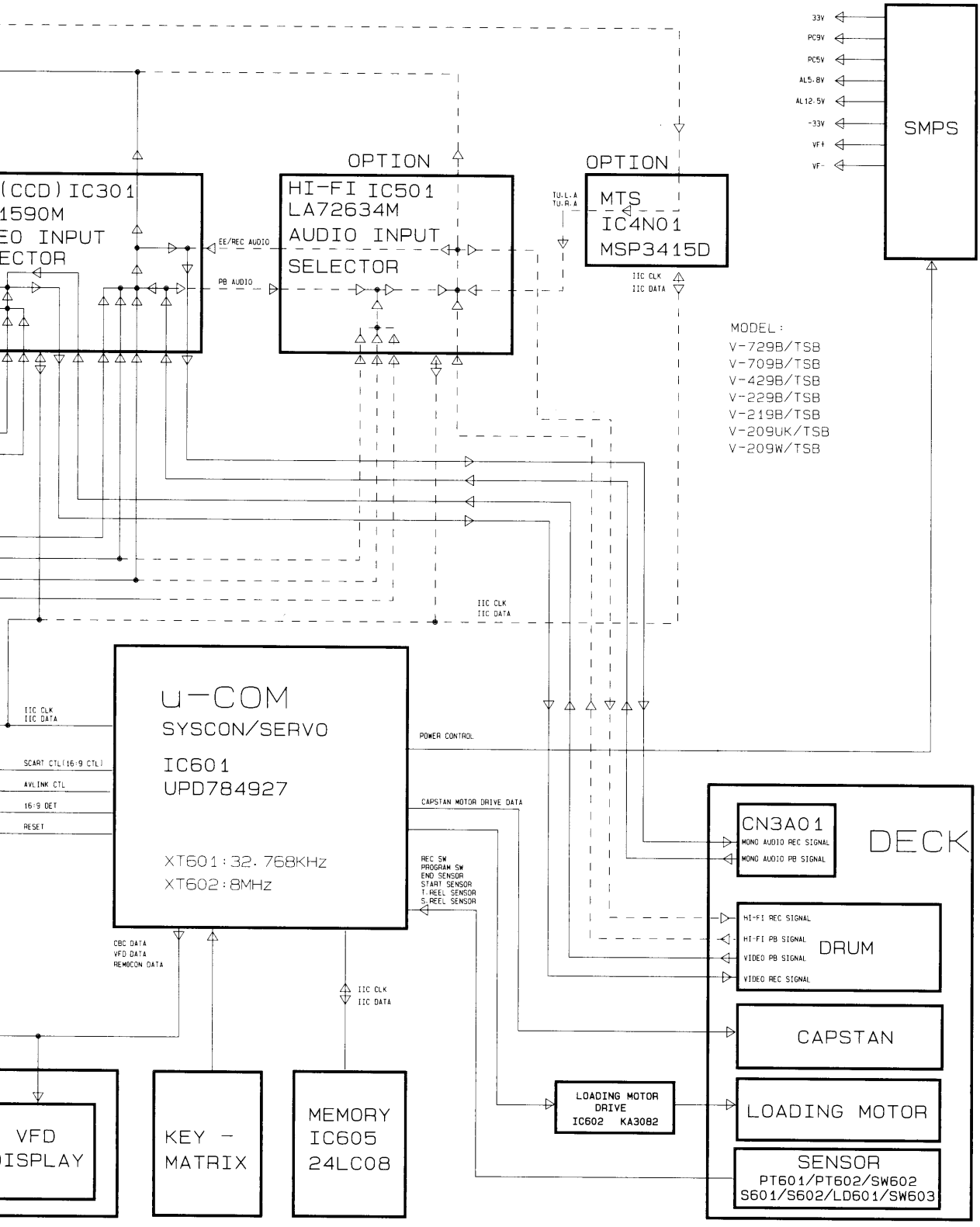
G/719EG/429EG/229EG/219EG/209EG/729F/609F/429F/419F/229F/219F/729W/429W



WITHOUT CANAL MODELS




WITHOUT CANAL MODELS
Application Models ; V-729B/709B/429B/229B/
TM-BLOCK
SIF
AUDIO OUT
VIDEO OUT
VIDEO IN
AUDIO IN
IIC CLK
IIC DATA
OSD/VPS/PDC
IC6P01
LC74776M
(OSD ONLY:LC74789M)
A/V(CCD) IC301
LA71590M
VIDEO INPUT
SELECTOR
EE/REC AUDI
PB AUDIO
VIDEO
2fsc
EURO AV JACK
DECORDER JACK
u-CO
SYSCON/
IC601
UPD7849
XT601:32.
XT602:8MH
SCART CTL(16:9 CTL)
AVLINK CTL
16:9 DET
RESET
CBC DATA
VFD DATA
REMOCON DATA
OPTION
REAR
AUDIO
OUTPUT
OPTION
FRONT
A/V
INPUT
CBC
OPTION
CBC
VFD
DISPLAY
KEY -
MATRIX


33V
PC9V
PC5V
AL5.8V
AL12.5V
-33V
VF+
VF-
SMPS
OPTION
HI-FI IC501
LA72634M
AUDIO INPUT
SELECTOR
OPTION
MTS
IC4N01
MSP3415D
IU.L.A
IU.R.A
IIC CLK
IIC DATA
EE/REC AUDIO
PB AUDIO
(CCD) IC301
1590M
EO INPUT
ECTOR
MODEL :
V-729B/TSB
V-709B/TSB
V-429B/TSB
V-229B/TSB
V-219B/TSB
V-209UK/TSB
V-209W/TSB
u-COM
SYSCON/SERVO
IC601
UPD784927
XT601 : 32.768KHz
XT602 : 8MHz
POWER CONTROL
CAPSTAN MOTOR DRIVE DATA
REC SW
PROGRAM SW
END SENSOR
START SENSOR
T-REEL SENSOR
S-REEL SENSOR
SCART CTL(16:9 CTL)
AVLINK CTL
16:9 DET
RESET
CBC DATA
VFD DATA
REMOCON DATA
CN3A01
MONO AUDIO REC SIGNAL
MONO AUDIO PB SIGNAL
DECK
HI-FI REC SIGNAL
HI-FI PB SIGNAL
VIDEO PB SIGNAL
VIDEO REC SIGNAL
DRUM
CAPSTAN
LOADING MOTOR
SENSOR
PT601/PT602/SW602
S601/S602/LD601/SW603
LOADING MOTOR DRIVE
IC602 KA3082
VFD
DISPLAY
KEY -
MATRIX
MEMORY
IC605
24LC08

9. PCB Diagrams

9-1 Main ---------- 9-2

9-2 Function-Timer (With AV-LinK) ---------- 9-4

9-3 Function-Timer (Without AV-LinK) ---------- 9-4

9-4 NICAM ---------- 9-4

9-5 Front Jack/CBC ---------- 9-4

9. PCB Diagrams

9-1 Main ---------- 9-2

9-2 Function-Timer (With AV-LinK) ---------- 9-4

9-3 Function-Timer (Without AV-LinK) ---------- 9-4

9-4 NICAM ---------- 9-4

9-5 Front Jack/CBC ---------- 9-4

------ 9-2

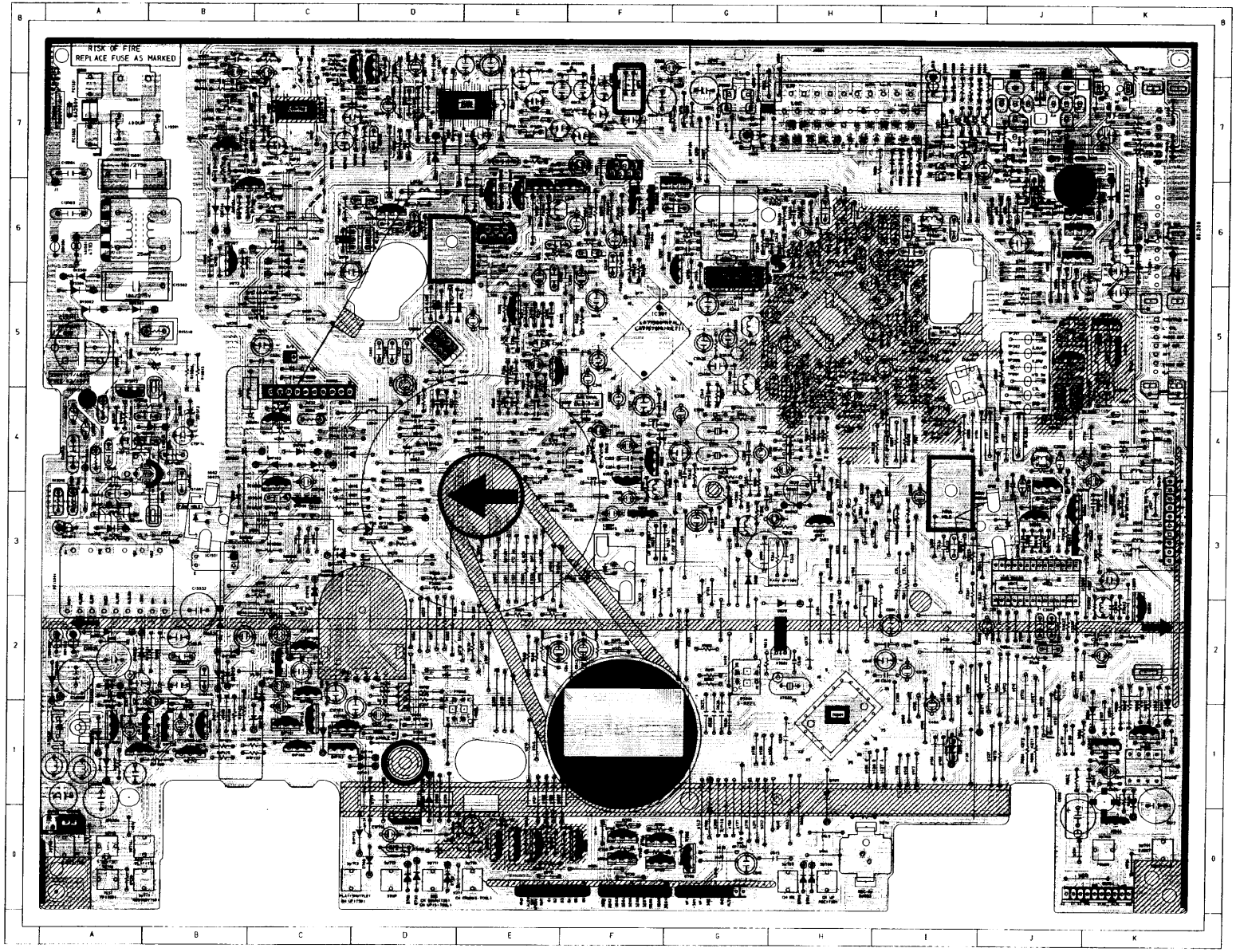
------ 9-4

----- 9-4

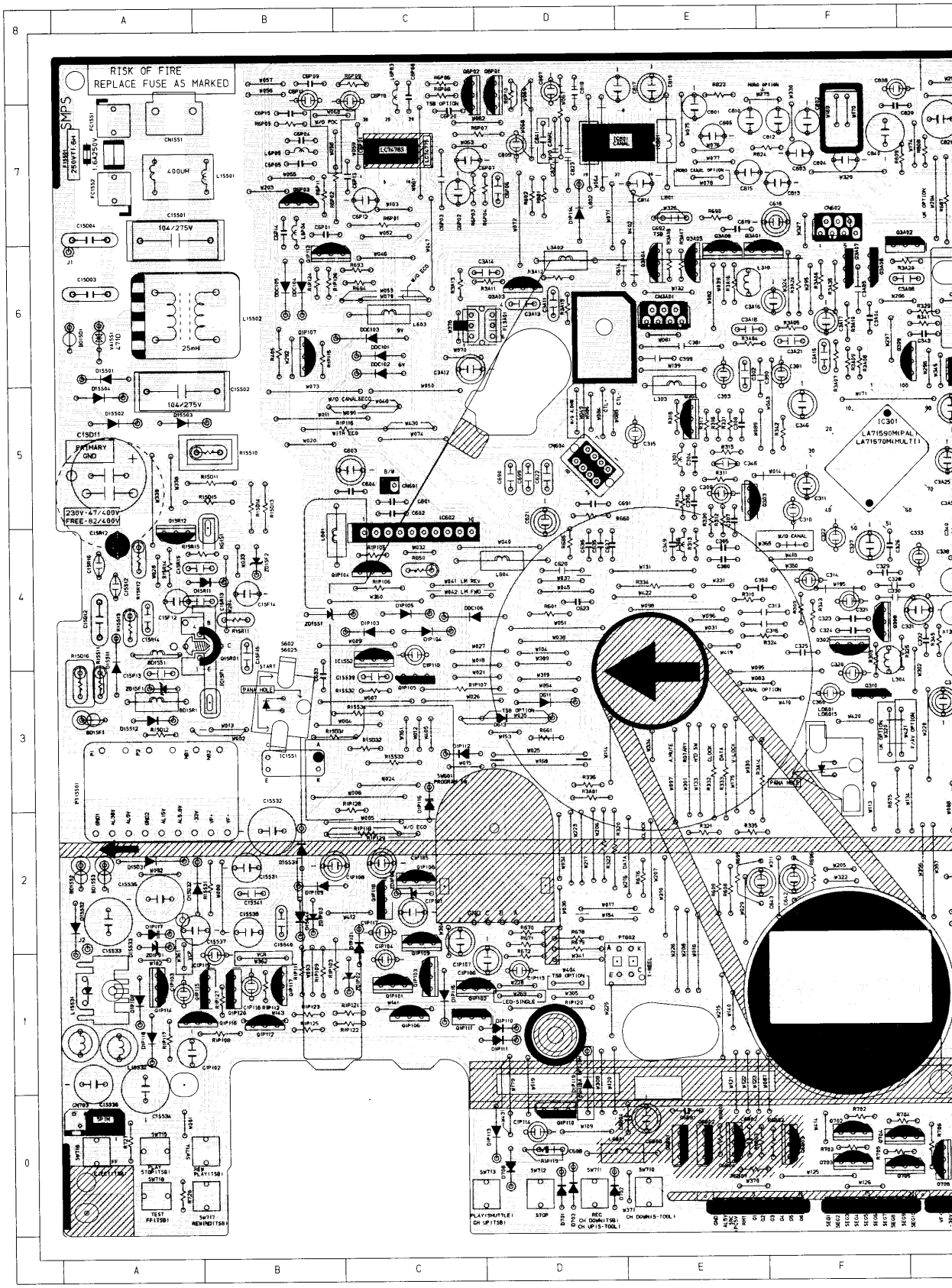
----- 9-4

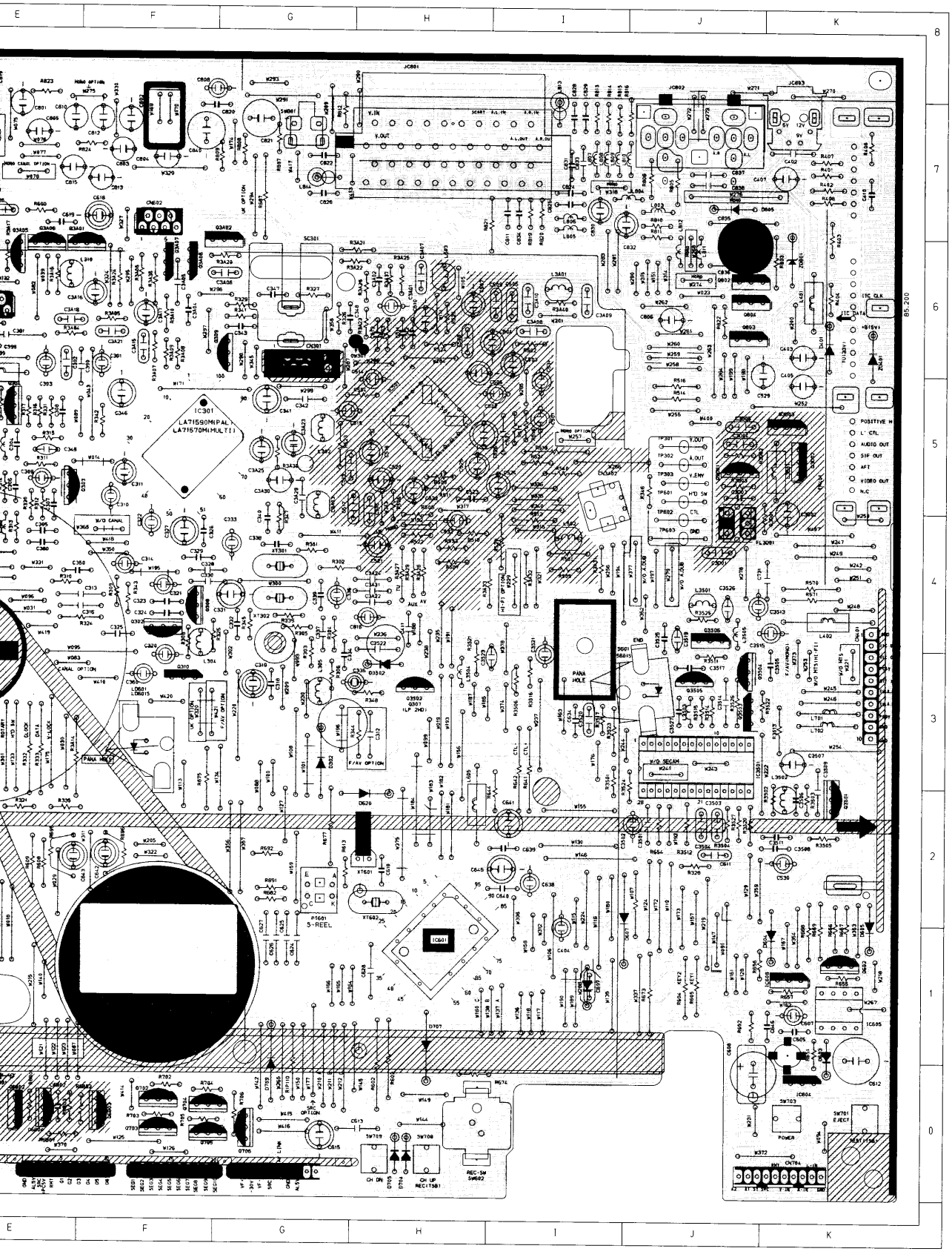
----- 9-4

9-1 Main



9-1 Main


RISK OF FIRE
REPLACE FUSE AS MARKED
SMPS
IC301
LA71590M(PAL)
LA71570M(MULTI)
PANA HOLE
LED-SINGLE


E
F
G
H
I
J
K
8
7
6
5
4
3
2
1
0
IC301
LA71590M(PAL)
LA71570M(MULTI)
IC601
S-REEL
PANA HOLE
W/O CANAL
W/O SECAM
F/AV OPTION
POWER
EJECT
CH UP
CH DN
REC-SW
POSITIVE H
L' CTL
AUDIO OUT
SIF OUT
AFT
VIDEO OUT
N.C
V.IN
V.OUT
12V
9V
5V
+B15V
ITC CLK
ITC DATA
85.200

*** RESISTOR ***

R1P103 (B1)
R1P105 (C4)
R1P106 (C4)
R1P107 (D3)
R1P108 (A1)
R1P109 (B1)
R1P110 (G0)
R1P111 (B1)
R1P112 (B1)
R1P115 (B6)
R1P116 (B5)
R1P117 (A1)
R1P118 (B2)
R1P119 (D0)
R1P120 (D1)
R1P121 (C1)
R1P122 (C1)
R1P123 (B1)
R1P124 (B6)
R1P125 (B1)
R1P126 (B6)
R1P127 (B1)
R1P128 (B3)
R1P129 (B2)
R1SD11 (B5)
R1SD12 (A3)
R1SD13 (B5)
R1SD14 (B4)
R1SD15 (A5)
R1SD16 (A3)
R1SD31 (B3)
R1SD32 (C3)
R1SR11 (B4)
R1SR12 (A4)
R1SR14 (A4)
R1SR15 (A4)
R1SS10 (B5)
R1SS11 (A3)
R1SS13 (A4)
R1SS31 (B2)
R1SS32 (C3)
R1SS33 (C3)
R1SS34 (B3)
R301 (G4)
R302 (G4)
R303 (G4)
R304 (G3)
R305 (G4)
R306 (G3)
R308 (F3)
R309 (F4)
R310 (E4)
R311 (E5)
R312 (E4)
R313 (E4)
R314 (E5)
R315 (E5)
R316 (E5)
R317 (E5)
R318 (E5)
R320 (D2)
R321 (E2)
R322 (D2)
R324 (E4)
R325 (F4)
R326 (G6)
R327 (G6)
R328 (J2)
R329 (G6)
R330 (E4)
R331 (E5)
R332 (E2)
R333 (E2)
R334 (D4)
R335 (E2)
R336 (D3)
R339 (G4)
R341 (G6)
R342 (F5)
R343 (F4)
R344 (H3)
R345 (G4)
R346 (J5)
R347 (G4)
R348 (H3)
R3A01 (D3)
R3A04 (E6)
R3A05 (F6)
R3A06 (F6)
R3A07 (F6)
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R3A09 (F6)
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R3A26 (H6)
R3A27 (H4)
R3A28 (H4)
R3A29 (H4)
R3A30 (G5)
R3A31 (I4)
R3A32 (I4)
R3A33 (I4)
R3A35 (F6)
R3A37 (H6)
R3A40 (E6)
R3D01 (K4)
R3D02 (J5)
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R3527 (J2)
R401 (K7)
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R404 (K6)
R405 (B6)
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R523 (G5)
R524 (H6)
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R570 (K4)
R571 (K4)
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R608 (E2)
R609 (E2)
R613 (G2)
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R651 (K0)
R652 (J1)
R654 (J2)
R655 (K1)
R656 (J1)
R657 (K1)
R660 (D5)
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R667 (K1)
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R676 (E2)
R677 (G2)
R678 (D2)
R679 (D2)
R682 (G2)
R685 (D4)
R687 (G6)
R690 (E7)
R691 (G2)
R692 (G2)
R693 (G6)
R694 (G6)
R695 (E2)
R696 (F2)
R6B01 (E0)
R6B02 (F0)
R6B03 (E0)
R6B07 (E0)
R6P01 (C7)
R6P02 (C7)
R6P03 (C7)
R6P04 (D7)
R6P05 (B7)
R6P06 (C8)
R6P07 (C7)
R6P08 (C8)
R6P09 (C8)
R6P10 (D7)
R6P11 (B7)
R702 (F0)
R703 (F0)
R704 (F0)
R705 (F0)
R706 (G0)
R727 (A0)
R728 (A0)
R801 (D7)
R802 (D7)
R803 (K6)
R805 (J7)
R806 (J7)
R807 (G7)
R808 (G7)
R809 (G7)
R810 (J7)
R811 (J7)
R812 (G7)
R813 (I7)
R814 (I7)
R815 (I7)
R816 (J7)
R819 (I7)
R820 (I7)
R821 (I6)
R822 (J6)
R823 (E8)
R824 (E7)
W107 (J1)
W229 (I4)
XT301 (G4)
XT302 (G4)

*** CONDENSER ***

C1P101 (C2)
C1P102 (A1)
C1P103 (A1)
C1P104 (C1)
C1P105 (C2)
C1P106 (D1)
C1P107 (C1)
C1P108 (C2)
C1P110 (C4)
C1P113 (D1)
C1P114 (D0)
C1P115 (B1)
C1P116 (B1)
C1P117 (C2)
C1SD03 (A6)
C1SD04 (A7)
C1SD12 (A4)
C1SF12 (A4)
C1SF13 (A3)
C1SF14 (B4)
C1SF15 (B4)
C1SR12 (A4)
C1SR13 (B4)
C1SR14 (A4)
C1SR15 (A4)
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C837 (J7)
C838 (J7)
C840 (F7)
C841 (D7)
XT601 (H2)
XT602 (H2)

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D1P110 (D1)
D1P111 (D1)
D1P112 (C3)
D1P113 (D0)
D1P114 (D7)
D1P115 (C1)
D1P116 (C3)
D1P117 (A2)
D1P118 (A1)
D1P119 (D1)
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D1SR11 (B4)
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D1SS03 (B5)
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D1SS11 (A4)
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D1SS31 (B2)
D1SS32 (A1)
D1SS33 (A1)
D1SS44 (B2)
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D604 (K1)
D605 (K1)
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ZD1SF1 (A3)
ZD1SF2 (B4)
ZD1SS1 (C4)
ZD401 (K6)
ZD801 (K7)

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IC608 (K1)
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Q1P108 (C2)
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CN1S51 (A7)
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CN401 (K4)
CN601 (C5)
CN602 (F7)
CN704 (K0)
IC3501 (J2)
IC605 (K1)
JC801 (H7)

*** CHIP ***

IC501 (H5)
IC6P01 (C7)

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R1P122 (C1)
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C802 (F7)
C803 (F7)
C804 (F7)
C805 (E7)
C806 (J6)

C347 (G6)
C348 (G6)
C349 (E4)
C350 (F4)
C360 (F3)
C380 (E4)
C381 (E6)
C390 (F6)
C399 (E6)
C3A01 (H6)
C3A02 (H6)
C3A04 (F6)
C3A05 (F6)
C3A06 (G6)
C3A07 (H6)
C3A08 (I6)
C3A09 (I6)
C3A10 (I6)
C3A11 (D6)
C3A12 (C6)
C3A13 (D6)
C3A14 (C6)
C3A15 (F6)
C3A16 (F6)
C3A17 (F6)
C3A18 (E6)
C3A21 (F6)
C3A22 (H4)
C3A23 (G5)
C3A24 (H4)
C3A25 (G5)
C3A29 (G4)
C3A30 (G5)
C3A31 (H4)
C3D01 (J4)
C3D02 (K5)
C3D03 (J5)
C3D04 (J5)
C3D05 (J5)
C3S01 (J2)
C3S02 (J2)
C3S03 (J2)
C3S04 (J2)
C3S05 (K3)
C3S06 (K2)
C3S07 (K3)
C3S08 (K2)
C3S09 (K2)
C3S11 (K2)
C3S13 (J4)
C3S14 (J3)
C3S15 (J4)
C3S17 (J3)
C3S19 (J4)
C3S20 (I3)
C3S21 (I3)
C3S22 (H3)
C3S23 (I3)
C3S25 (J3)
C3S26 (J4)
C3S27 (J3)
C402 (K7)
C403 (K6)
C404 (I1)
C405 (K5)
C407 (K7)
C410 (K7)
C411 (H4)
C501 (I5)
C502 (I5)
C503 (I5)
C504 (I6)
C505 (I6)
C506 (H6)
C507 (H6)
C508 (H6)
C509 (I6)
C510 (H6)
C511 (H6)
C512 (H6)
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C515 (H5)
C516 (H4)
C517 (H4)
C518 (H5)
C519 (G5)
C520 (H5)
C521 (H4)
C522 (H5)
C523 (H5)
C524 (I5)
C525 (H5)
C526 (H5)
C527 (I5)
C529 (J5)
C530 (K2)
C531 (I6)
C532 (H4)
C601 (C5)
C602 (C5)
C603 (C5)
C604 (B5)
C605 (K1)
C607 (K1)
C610 (H2)
C611 (J2)
C612 (K1)
C613 (G0)
C614 (E6)
C615 (G0)
C618 (F7)
C619 (E7)
C620 (D4)
C621 (D4)
C622 (D5)
C623 (D4)
C624 (G1)
C625 (G1)
C626 (G1)
C627 (G1)
C628 (H1)
C633 (B3)
C634 (I3)
C635 (D4)
C636 (D4)
C637 (D4)
C638 (I2)
C639 (I2)
C640 (I2)
C641 (I2)
C642 (F2)
C643 (E2)
C645 (I2)
C646 (K1)
C690 (D5)
C691 (D5)
C692 (E7)
C697 (I1)
C698 (D0)
C699 (D5)
C6B01 (E0)
C6B02 (E0)
C6B03 (E0)
C6B04 (E0)
C6P01 (B7)
C6P02 (C7)
C6P03 (C7)
C6P04 (B7)
C6P05 (B7)
C6P06 (D7)
C6P07 (C7)
C6P08 (C7)
C6P09 (B8)
C6P10 (C8)
C6P11 (B8)
C6P12 (C7)
C6P13 (C7)
C6P14 (B7)
C6P15 (B7)
C6P20 (C7)
C731 (K4)
C801 (E7)
C802 (F7)
C803 (F7)
C804 (F7)
C805 (E7)
C806 (J6)
C807 (D7)
C808 (F8)
C809 (D7)
C810 (E7)
C811 (I7)
C812 (F7)
C813 (F7)
C814 (E7)
C815 (E7)
C816 (H4)
C817 (E8)
C819 (E8)
C820 (G7)
C821 (G7)
C822 (G7)
C823 (D7)
C824 (I7)
C825 (I7)
C826 (G7)
C827 (D7)
C828 (I7)
C829 (I7)
C830 (I7)
C831 (I7)
C832 (I7)
C833 (I7)
C834 (I7)
C835 (J7)
C836 (J6)
C837 (J7)
C838 (J7)
C840 (F7)
C841 (D7)
XT601 (H2)
XT602 (H2)

*** DIODE ***

D1P101 (C2)
D1P103 (C4)
D1P104 (C4)
D1P105 (C4)
D1P108 (A1)
D1P109 (B2)
D1P110 (D1)
D1P111 (D1)
D1P112 (C3)
D1P113 (D0)
D1P114 (D7)
D1P115 (C1)
D1P116 (C3)
D1P117 (A2)
D1P118 (A1)
D1P119 (D1)
D1SD31 (A2)
D1SD32 (A2)
D1SR11 (B4)
D1SS01 (A6)
D1SS02 (A5)
D1SS03 (B5)
D1SS04 (A5)
D1SS11 (A4)
D1SS12 (A3)
D1SS31 (B2)
D1SS32 (A1)
D1SS33 (A1)
D1SS44 (B2)
D302 (G3)
D3S02 (H3)
D401 (K6)
D603 (K0)
D604 (K1)
D605 (K1)
D607 (J1)
D611 (D3)
D620 (H2)
D6B01 (B0)
D701 (D0)
D702 (D0)
D703 (D0)
D704 (H0)
D705 (H0)
D707 (H0)
D708 (D0)
D709 (G1)
D805 (J7)
DDC101 (C6)
DDC102 (C6)
DDC103 (B6)
DDC104 (B6)
DDC105 (B6)
DDC106 (C4)
W288 (I1)
ZD1P01 (A2)
ZD1P02 (C1)
ZD1P03 (B2)
ZD1P06 (C2)
ZD1SF1 (A3)
ZD1SF2 (B4)
ZD1SS1 (C4)
ZD401 (K6)
ZD801 (K7)

*** TR ***

IC1SS2 (C4)
IC604 (K0)
IC608 (K1)
Q1P101 (C1)
Q1P102 (C1)
Q1P103 (C1)
Q1P104 (C4)
Q1P105 (C3)
Q1P106 (C1)
Q1P107 (B6)
Q1P108 (C2)
Q1P109 (C2)
Q1P110 (D0)
Q1P111 (C1)
Q1P112 (B1)
Q1P113 (B6)
Q1P114 (A1)
Q1P115 (B1)
Q1P116 (A1)
Q1P117 (B1)
Q1P118 (C2)
Q1P120 (B1)
Q1SR12 (A4)
Q302 (F4)
Q303 (E5)
Q304 (E5)
Q308 (F4)
Q309 (G6)
Q310 (F3)
Q3A01 (E6)
Q3A02 (G6)
Q3A03 (D6)
Q3A04 (E6)
Q3A05 (E6)
Q3A06 (E6)
Q3A07 (F6)
Q3A08 (F6)
Q3D01 (J5)
Q3D02 (K5)
Q3D03 (K5)
Q3S01 (K3)
Q3S02 (H3)
Q3S03 (J3)
Q3S04 (J3)
Q3S05 (J3)
Q3S06 (J4)
Q602 (K1)
Q6B01 (E0)
Q6B02 (E0)
Q6B03 (F0)
Q6B04 (E0)
Q6P01 (D7)
Q6P02 (C7)
Q6P03 (B7)
Q702 (F0)
Q703 (F0)
Q704 (F0)
Q705 (F0)
Q706 (G0)
Q802 (J6)
Q803 (J6)
Q804 (J6)

*** IC&WAFER ***

CN1SS1 (A7)
CN3A01 (E6)
CN401 (K4)
CN601 (C5)
CN602 (F7)
CN704 (K0)
IC3S01 (J2)
IC605 (K1)
JC801 (H7)

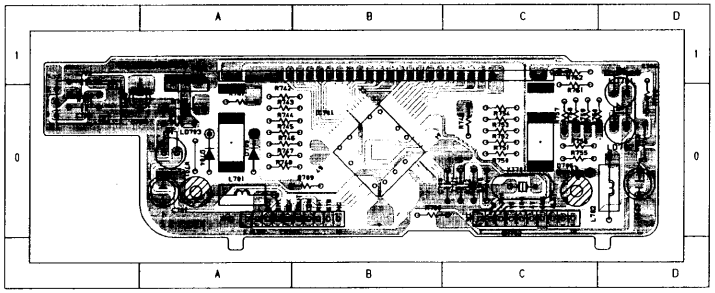
*** CHIP ***

IC501 (H5)
IC6P01 (C7)

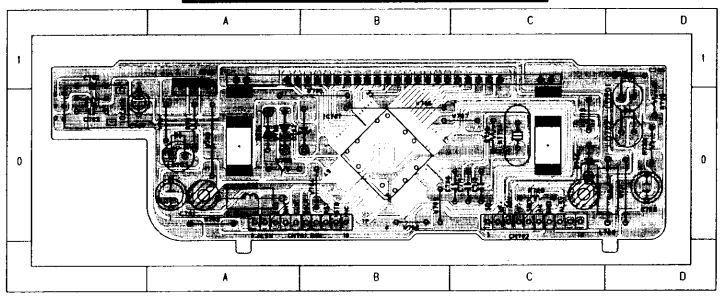
9-2 Function-Timer (With AV-Link)

[redacted]

DOUBLE-SIDED PCB

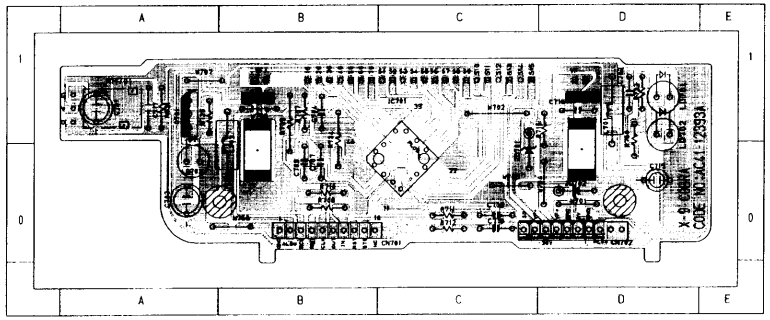


ONE-SIDED PCB



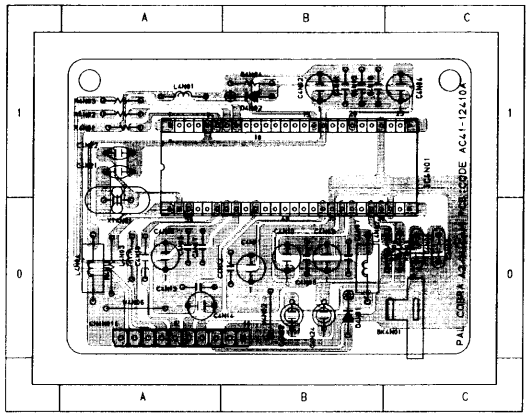
9-3 Function-Timer (Without AV-Link)

[redacted]



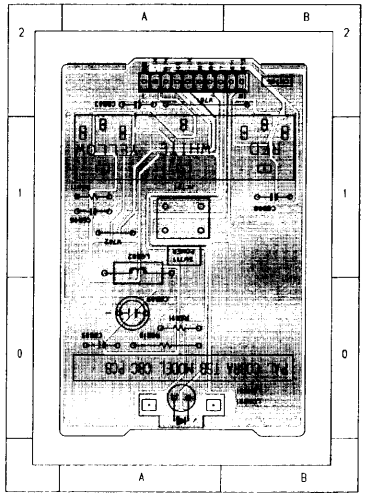
9-4 NICAM

[redacted]



9-5 Front Jack/CBC

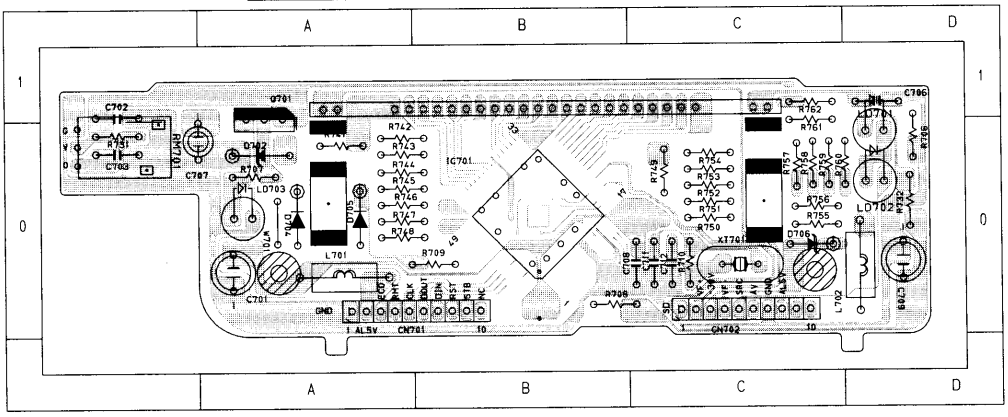
[redacted]



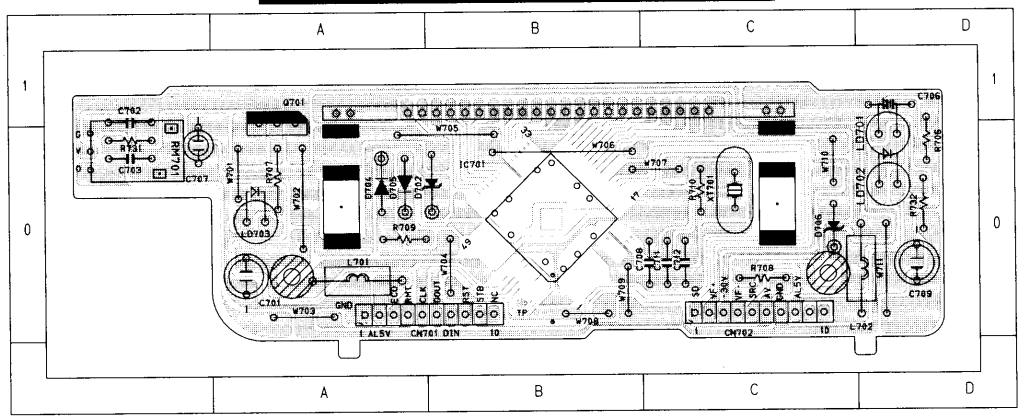
9-2 Function-Timer (With AV-Link)

Application Models : V-729B/V-429B/V-229B/V-219B/V-729EG/V-429EG
V-729F/V-429F/V-229F

DOUBLE-SIDED PCB

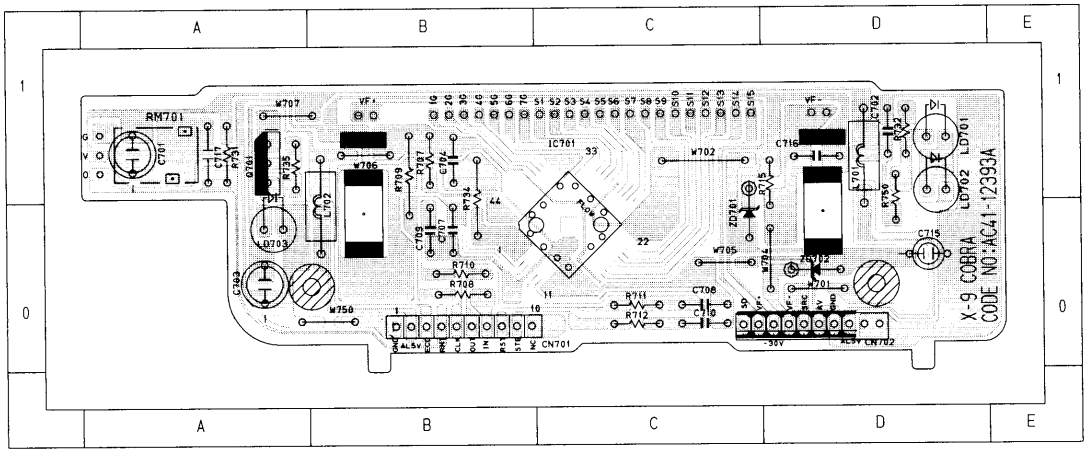


ONE-SIDED PCB



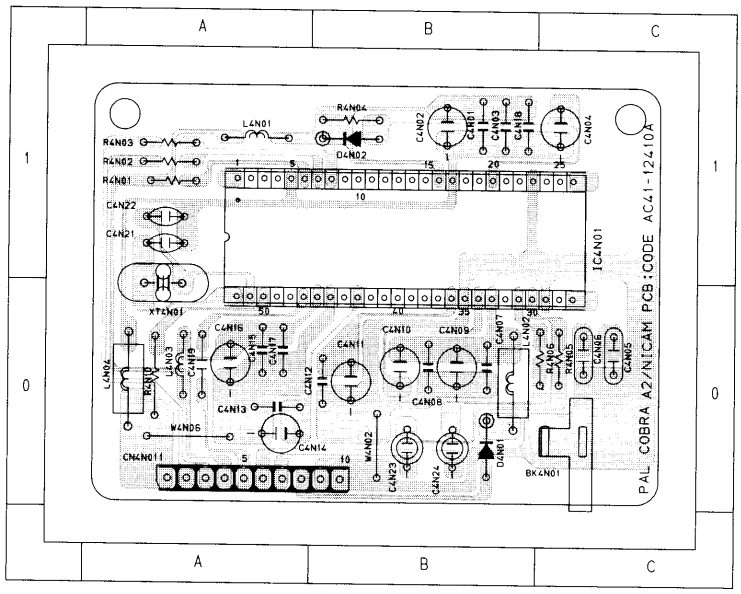
9-3 Function-Timer (Without AV-Link)

Application Models : V-709B/V-209UK/V-719EG/V-229EG/V-219EG/V-209EG
V-609F/V-419F/V-219F/V-729W/V-429W/V-209W



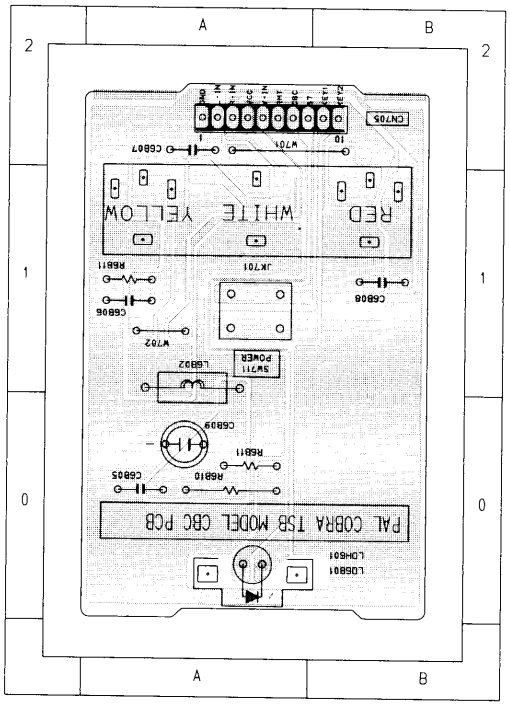
9-4 NICAM

Application Models : V-729B/V-709B/V-729EG/V-719EG/V-729F/V-609F/V-729W



9-5 Front Jack/CBC

Application Models : V-729B/V-429B/V-229B/V-219B/V-729EG/V-429EG V-729F/V-429F/V-229F



10. Schematic Diagrams

◆ Block Identification of Main PCB ---------- 10-2

10-1 S.M.P.S. ---------- 10-3

10-2 Power Drive ---------- 10-4

10-3 System Control/Servo ---------- 10-5

10-4 Audio/Video ---------- 10-6

10-5 Hi-Fi ---------- 10-7

10-6 TM-Block ---------- 10-8

10-7 SECAM ---------- 10-9

10-8 A2/NICAM ---------- 10-10

10-9 Input-Output ---------- 10-11

10-10 OSD/VPS/PDC ---------- 10-12

10-11 OSD (Without VPS/PDC) ---------- 10-13

10-12 Function-Timer (With AV-Link) ---------- 10-14

10-13 Function-Timer (Without AV-Link) ---------- 10-15

10-14 Remote-Control (Multi) ---------- 10-16

10-15 Remote-Control (VCR Only) ---------- 10-17

10. Schematic Diagrams

◆ Block Identification of Main PCB - 10-2

10-1 S.M.P.S. - 10-3

10-2 Power Drive - 10-4

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10-4 Audio/Video - 10-6

10-5 Hi-Fi - 10-7

10-6 TM-Block - 10-8

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10-9 Input-Output - 10-11

10-10 OSD/VPS/PDC - 10-12

10-11 OSD (Without VPS/PDC) - 10-13

10-12 Function-Timer (With AV-Link) - 10-14

10-13 Function-Timer (Without AV-Link) - 10-15

10-14 Remote-Control (Multi) - 10-16

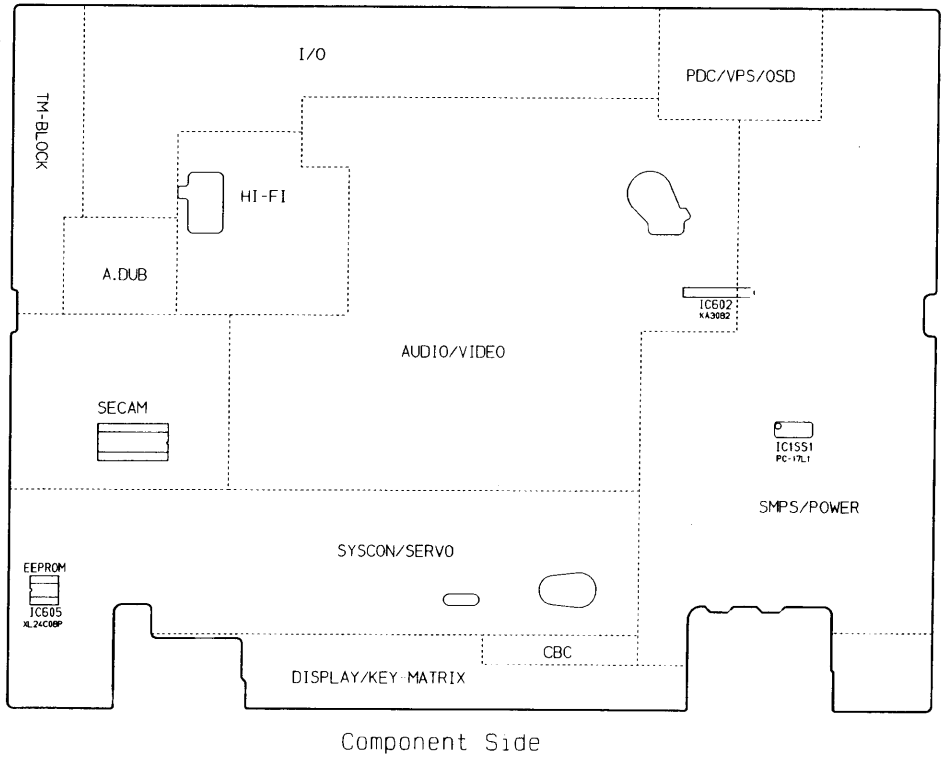
10-15 Remote-Control (VCR Only) - 10-17

- 10-2
- 10-3
- 10-4
- 10-5
- 10-6
- 10-7
- 10-8
- 10-9
10-10
- 10-11
10-12
10-13
- 10-14
- 10-15
10-16
10-17

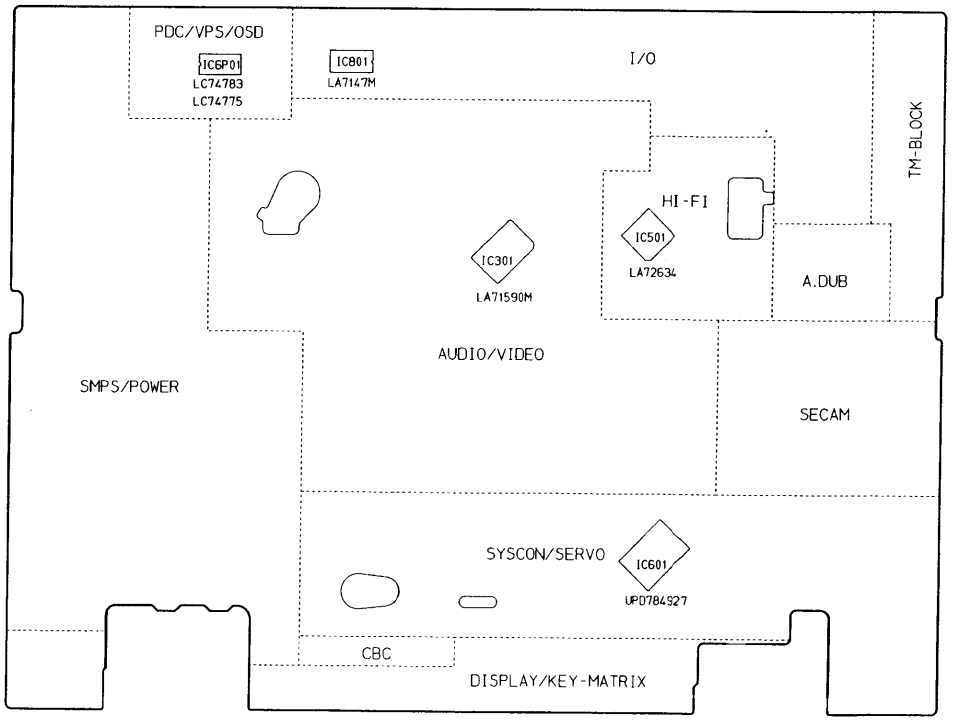
Note

For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

◆ Block Identification of Main PCB



Component Side



Conductor Side

Note

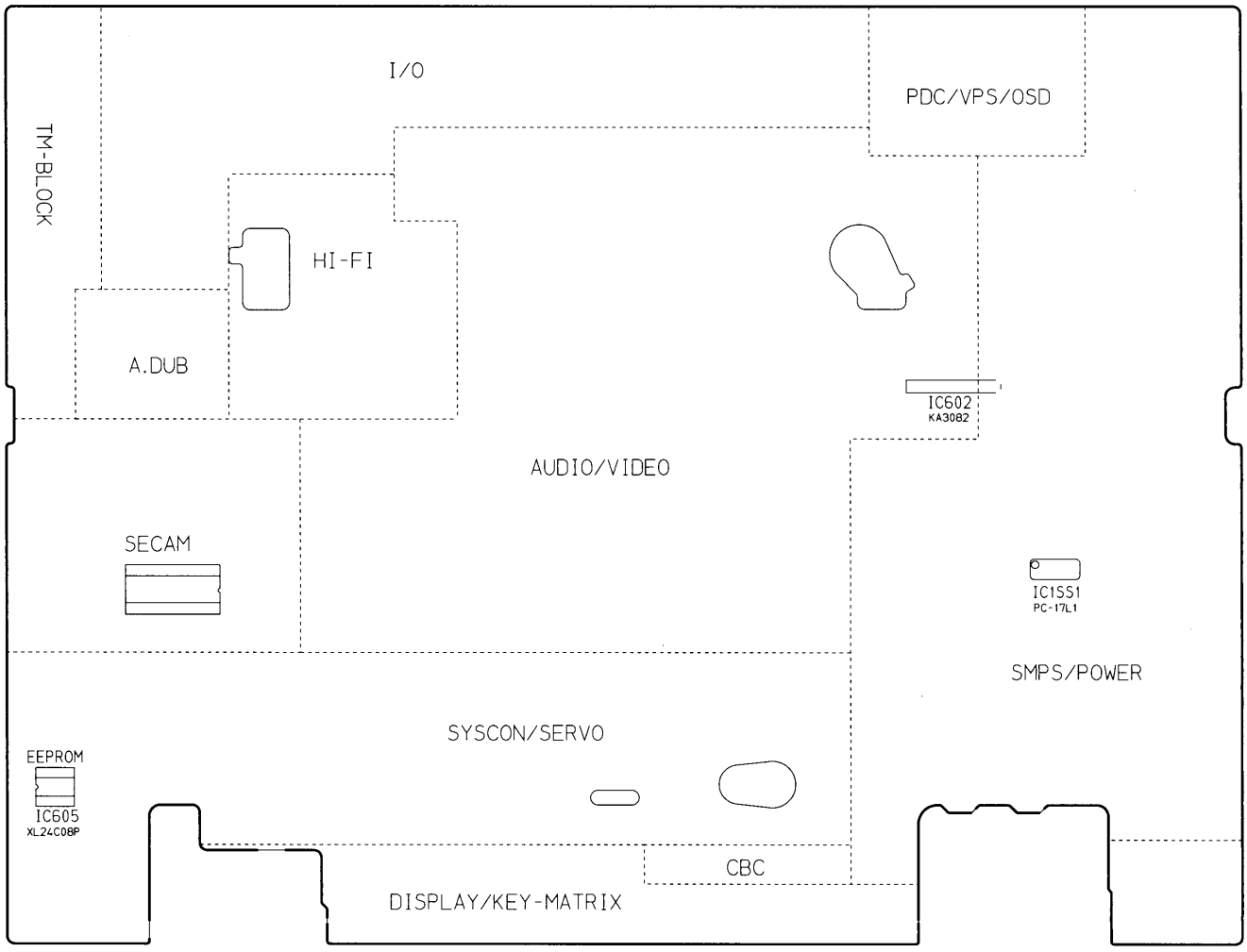
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

◆ Block Identification of Main PCB

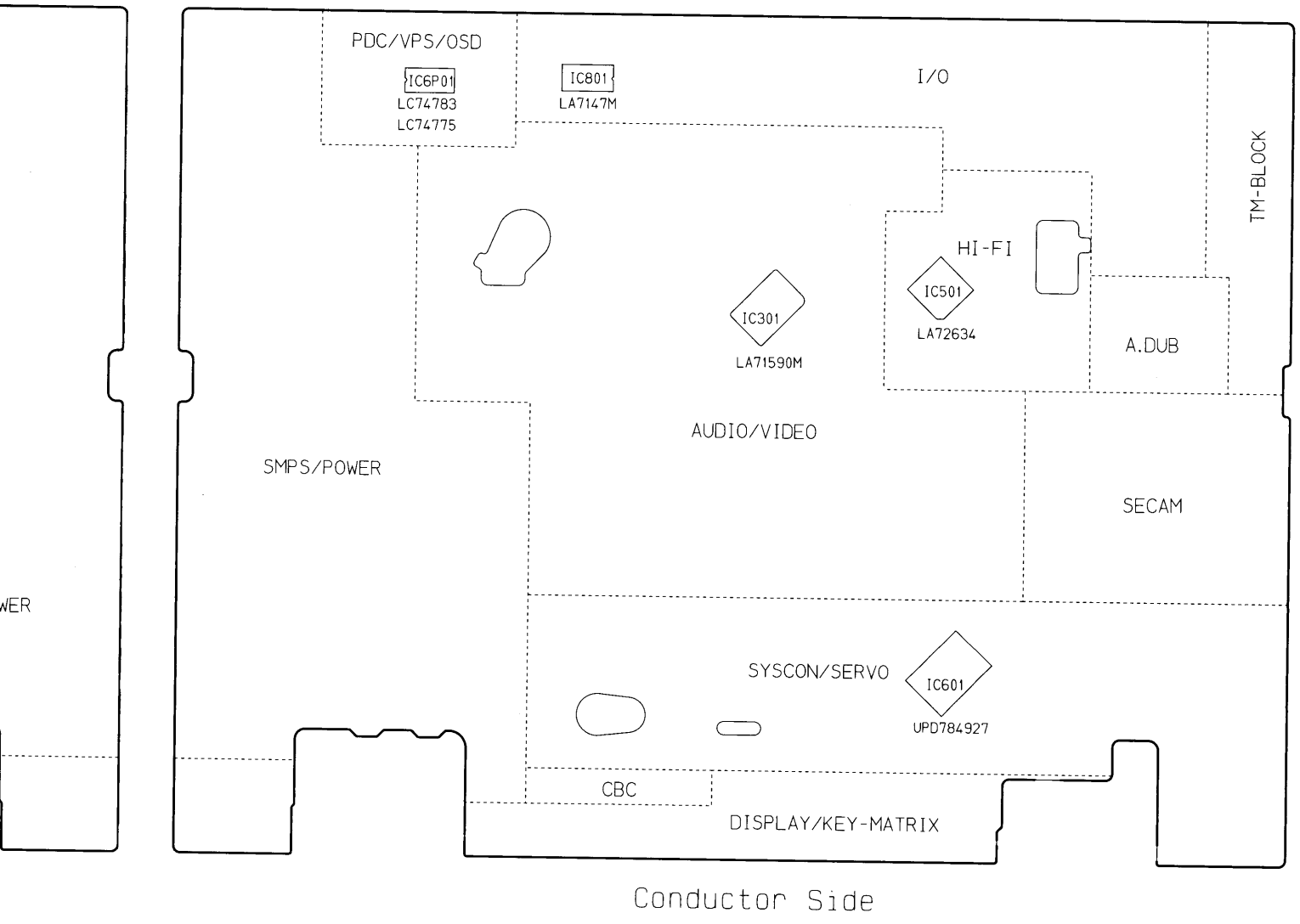


Component Side

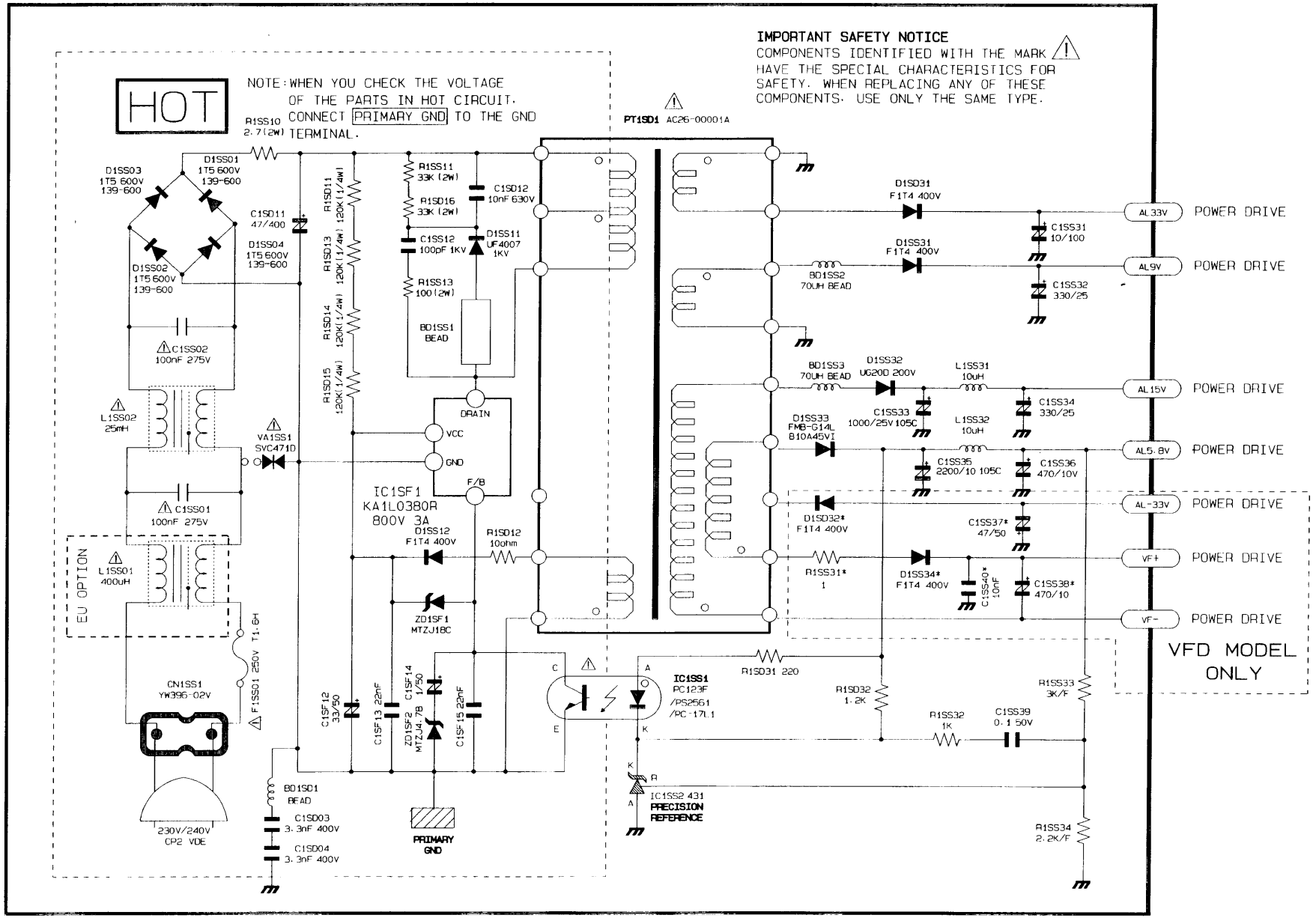
ribed under the

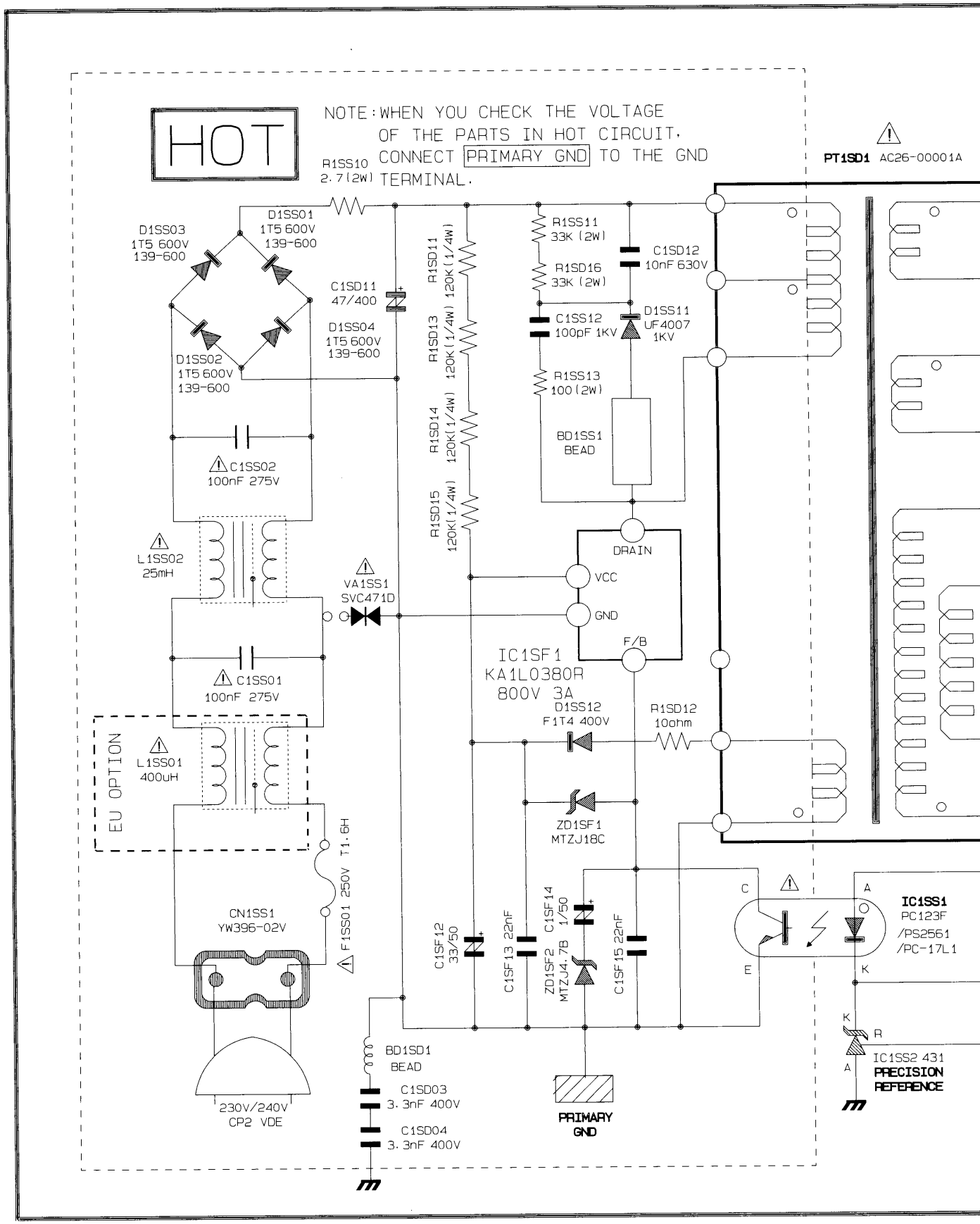
y be slightly different

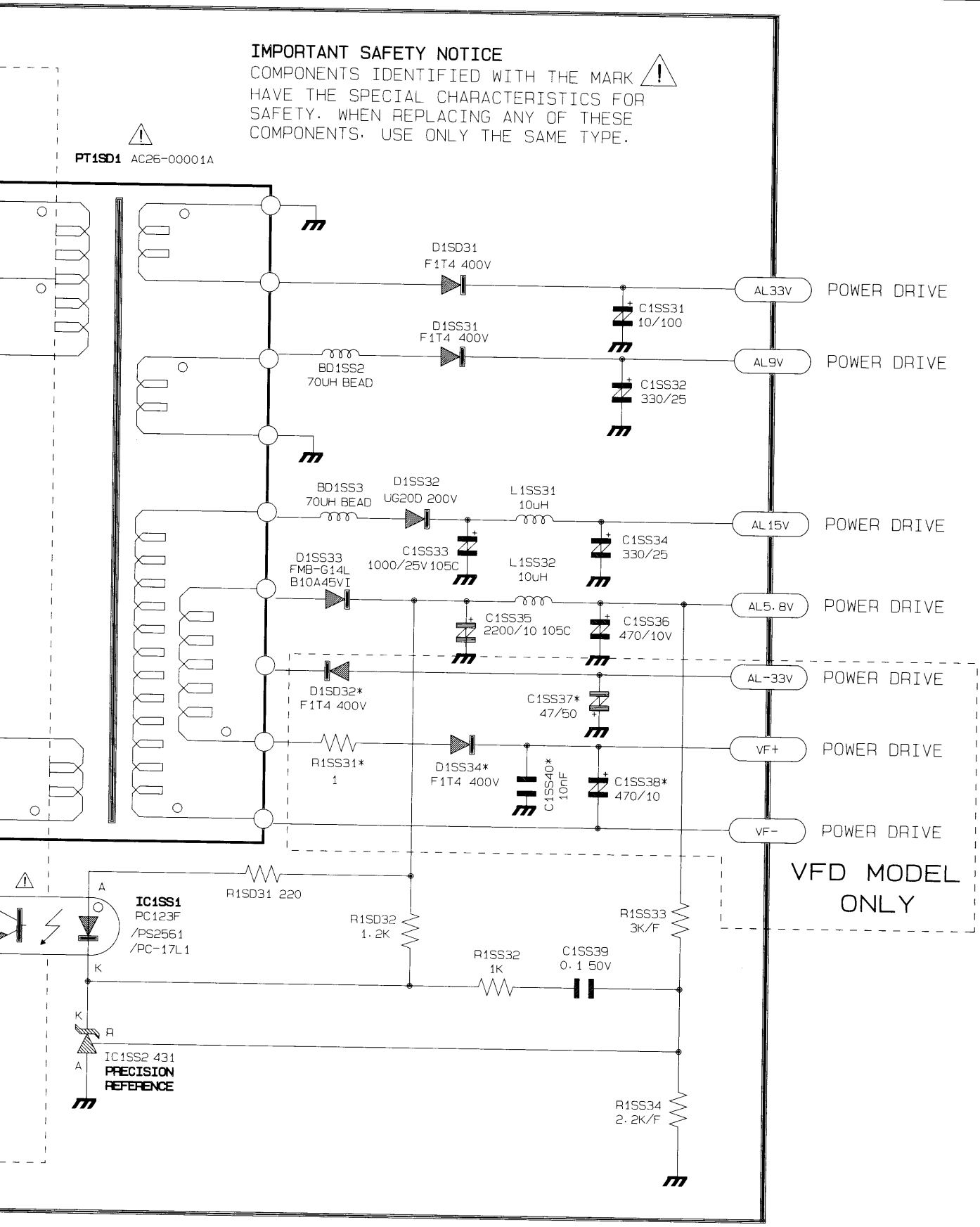
ponents.



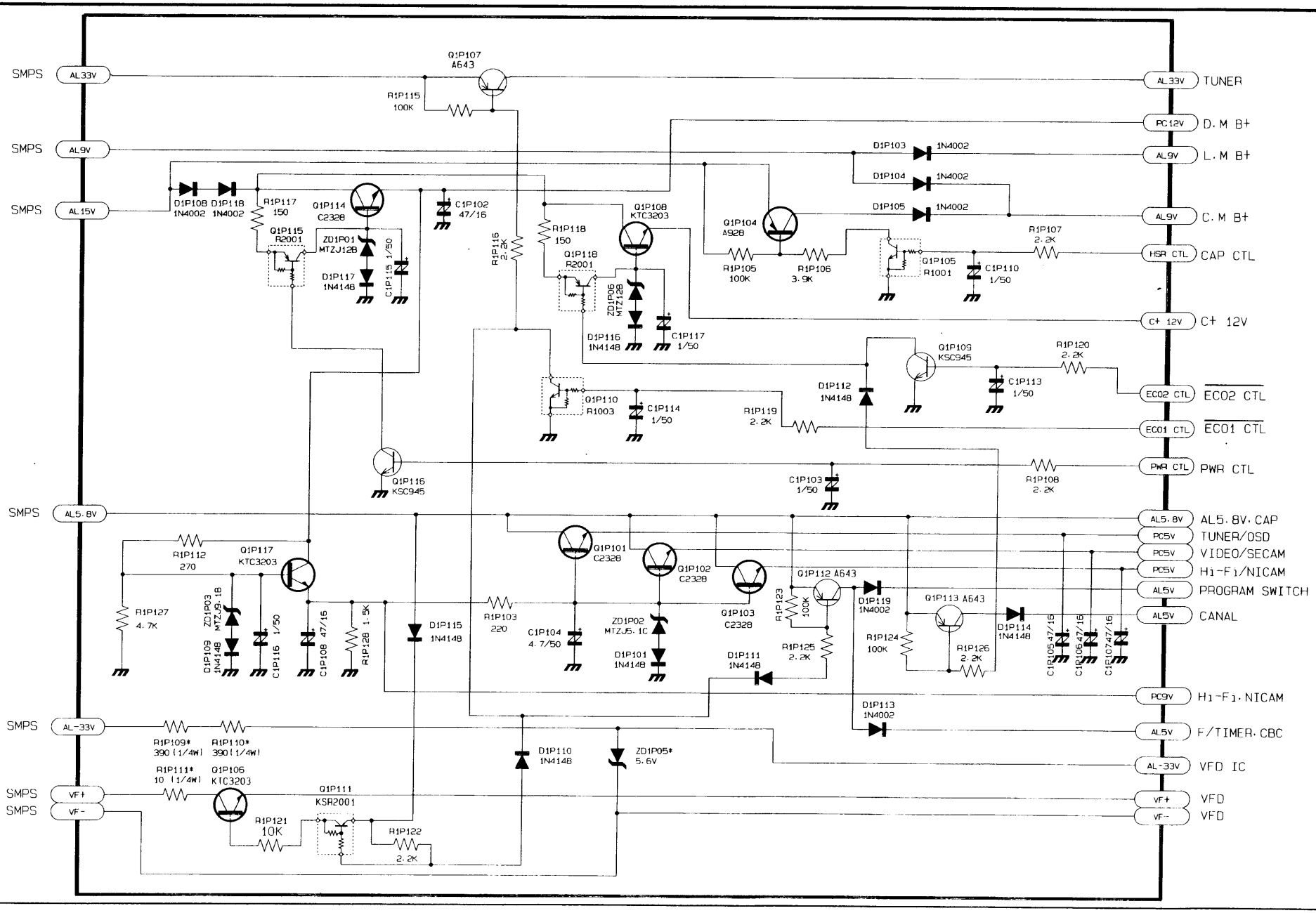
10-1 S.M.P.S./Power



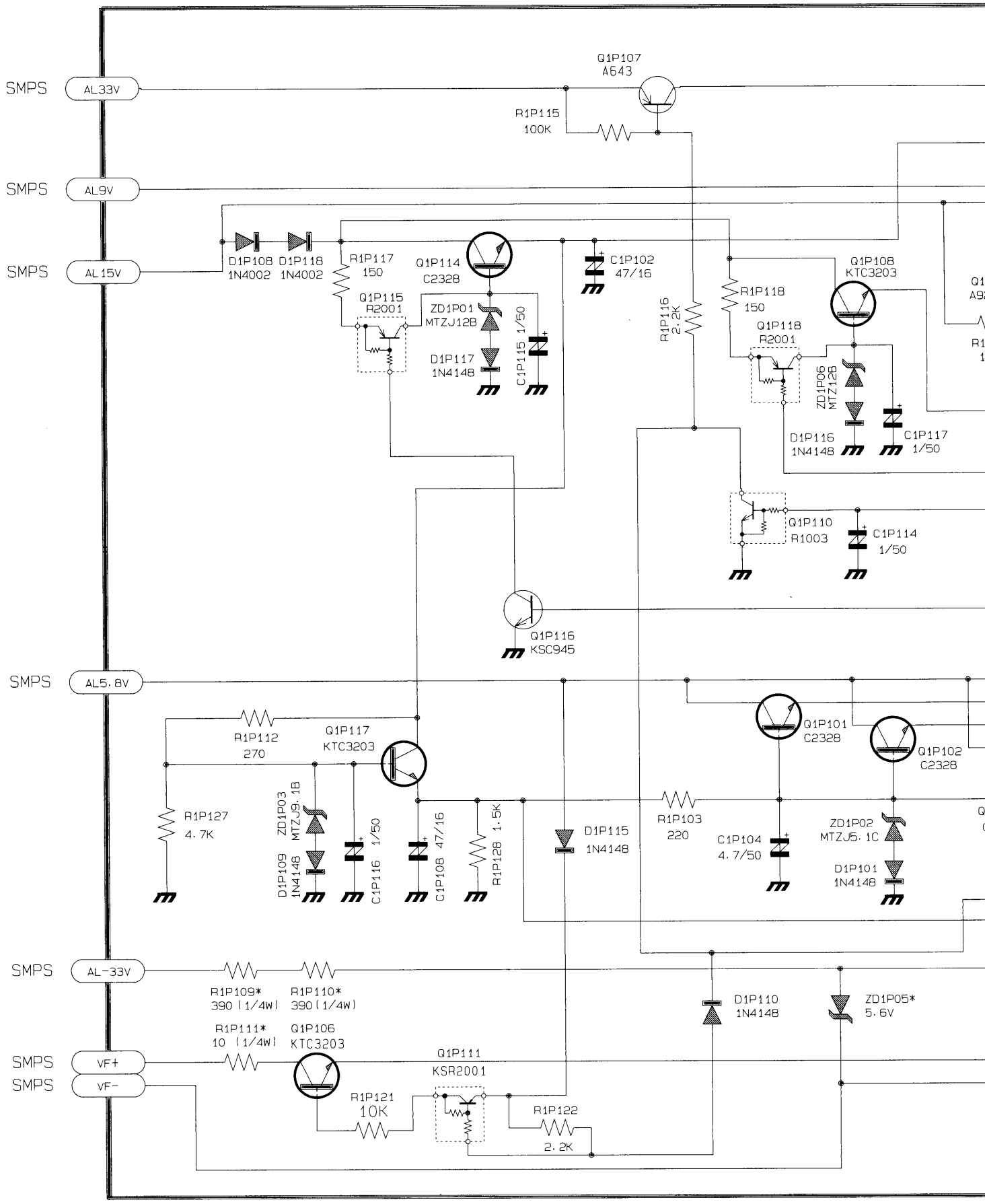

HOT
NOTE : WHEN YOU CHECK THE VOLTAGE OF THE PARTS IN HOT CIRCUIT, CONNECT PRIMARY GND TO THE GND TERMINAL.
R1SS10 2.7(2W)
PT1SD1 AC26-00001A
D1SS03 1T5 600V 139-600
D1SS01 1T5 600V 139-600
D1SS04 1T5 600V 139-600
D1SS02 1T5 600V 139-600
C1SD11 47/400
R1SD11 120K(1/4W)
R1SD13 120K(1/4W)
R1SD14 120K(1/4W)
R1SD15 120K(1/4W)
R1SS11 33K (2W)
R1SD16 33K (2W)
C1SD12 10nF 630V
C1SS12 100pF 1KV
D1SS11 UF4007 1KV
R1SS13 100 (2W)
BD1SS1 BEAD
C1SS02 100nF 275V
L1SS02 25mH
VA1SS1 SVC471D
DRAIN
VCC
GND
F/B
IC1SF1 KA1L0380R 800V 3A
C1SS01 100nF 275V
D1SS12 F1T4 400V
R1SD12 10ohm
EU OPTION
L1SS01 400uH
ZD1SF1 MTZJ18C
F1SS01 250V T1.6H
CN1SS1 YW396-02V
C1SF12 33/50
C1SF13 22nF
ZD1SF2 MTZJ4.7B
C1SF14 1/50
C1SF15 22nF
C
A
E
K
IC1SS1 PC123F /PS2561 /PC-17L1
R
IC1SS2 431 PRECISION REFERENCE
BD1SD1 BEAD
C1SD03 3.3nF 400V
C1SD04 3.3nF 400V
230V/240V CP2 VDE
PRIMARY GND

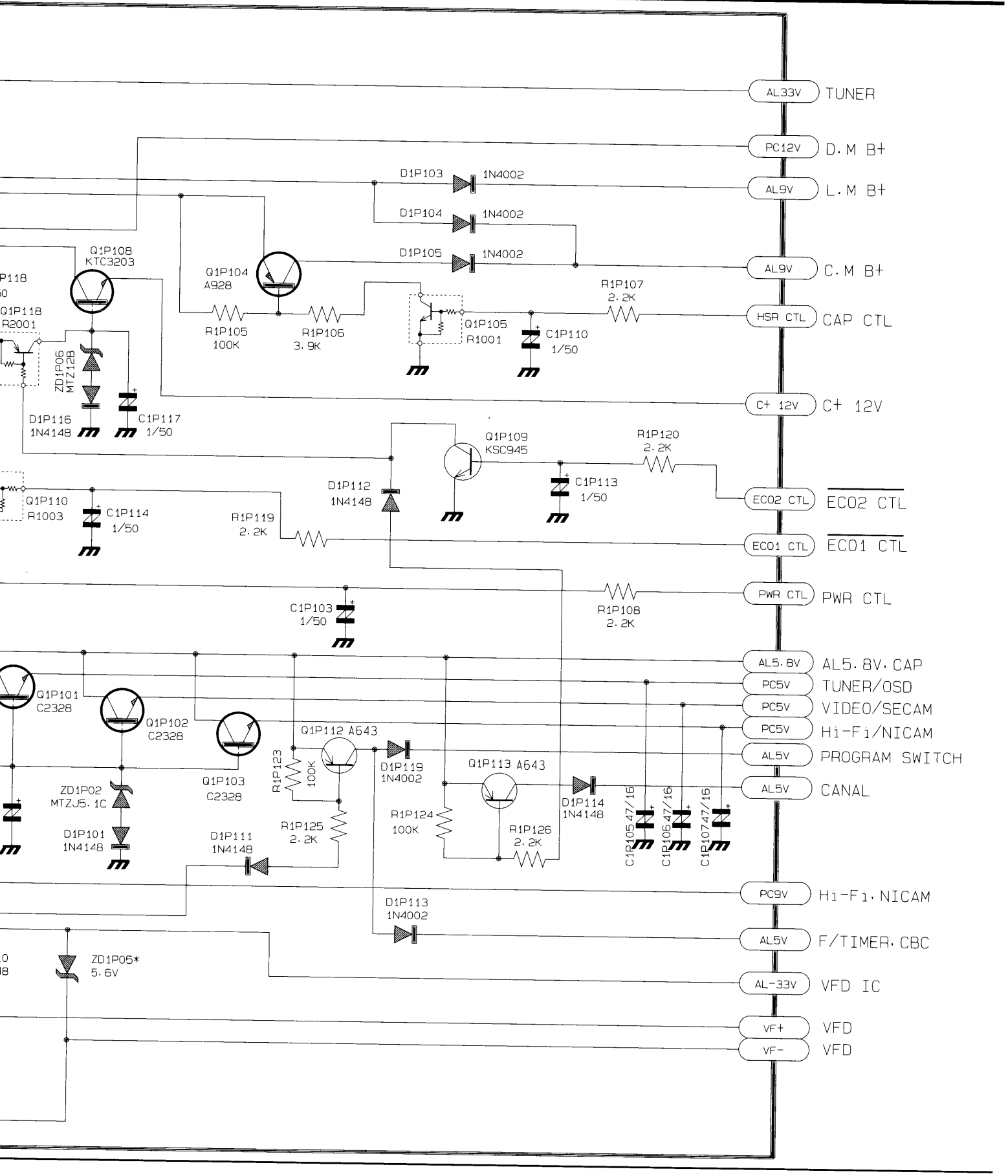

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.
PT1SD1 AC26-00001A
D1SD31 F1T4 400V
C1SS31 10/100
AL33V
POWER DRIVE
D1SS31 F1T4 400V
BD1SS2 70UH BEAD
C1SS32 330/25
AL9V
POWER DRIVE
BD1SS3 70UH BEAD
D1SS32 UG20D 200V
L1SS31 10uH
C1SS33 1000/25V 105C
L1SS32 10uH
C1SS34 330/25
AL15V
POWER DRIVE
D1SS33 FMB-G14L B10A45VI
C1SS35 2200/10 105C
C1SS36 470/10V
AL5.8V
POWER DRIVE
D1SD32* F1T4 400V
C1SS37* 47/50
AL-33V
POWER DRIVE
R1SS31* 1
D1SS34* F1T4 400V
C1SS40* 10nF
C1SS38* 470/10
VF+
POWER DRIVE
VF-
POWER DRIVE
VFD MODEL ONLY
R1SD31 220
IC1SS1 PC123F /PS2561 /PC-17L1
R1SD32 1.2K
R1SS33 3K/F
R1SS32 1K
C1SS39 0.1 50V
IC1SS2 431 PRECISION REFERENCE
R1SS34 2.2K/F

10-2 Power Drive

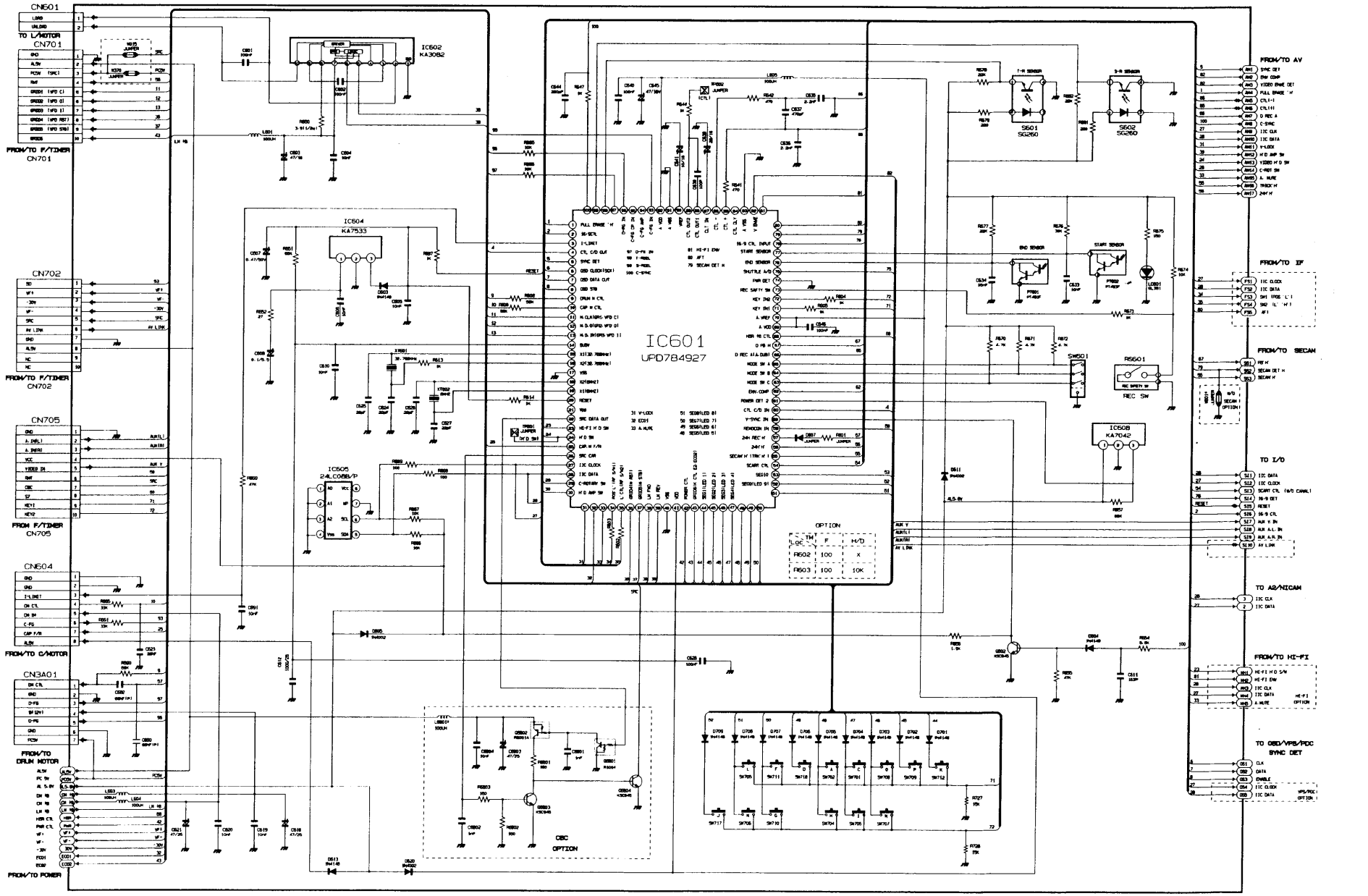


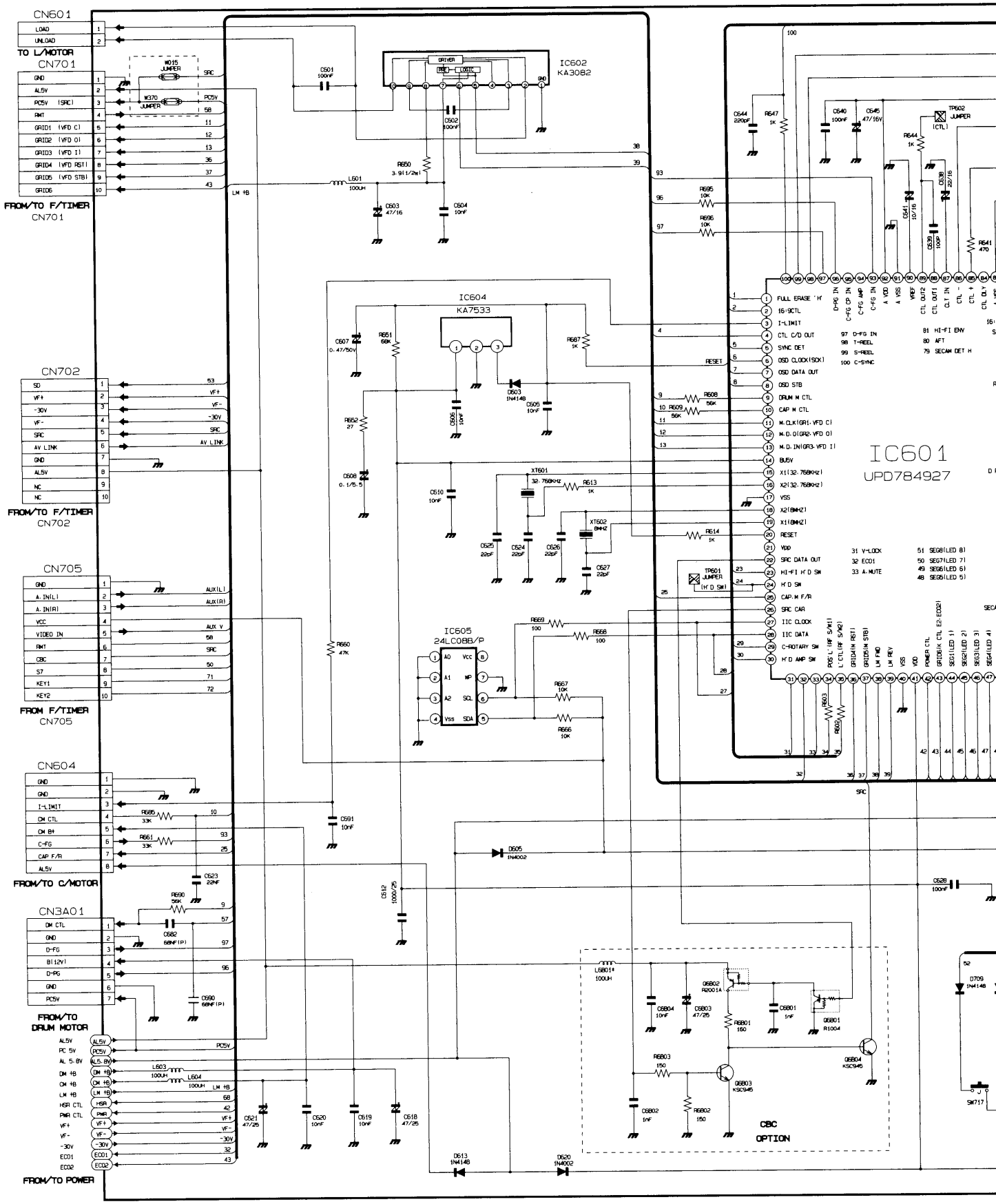
10-2 Power Drive

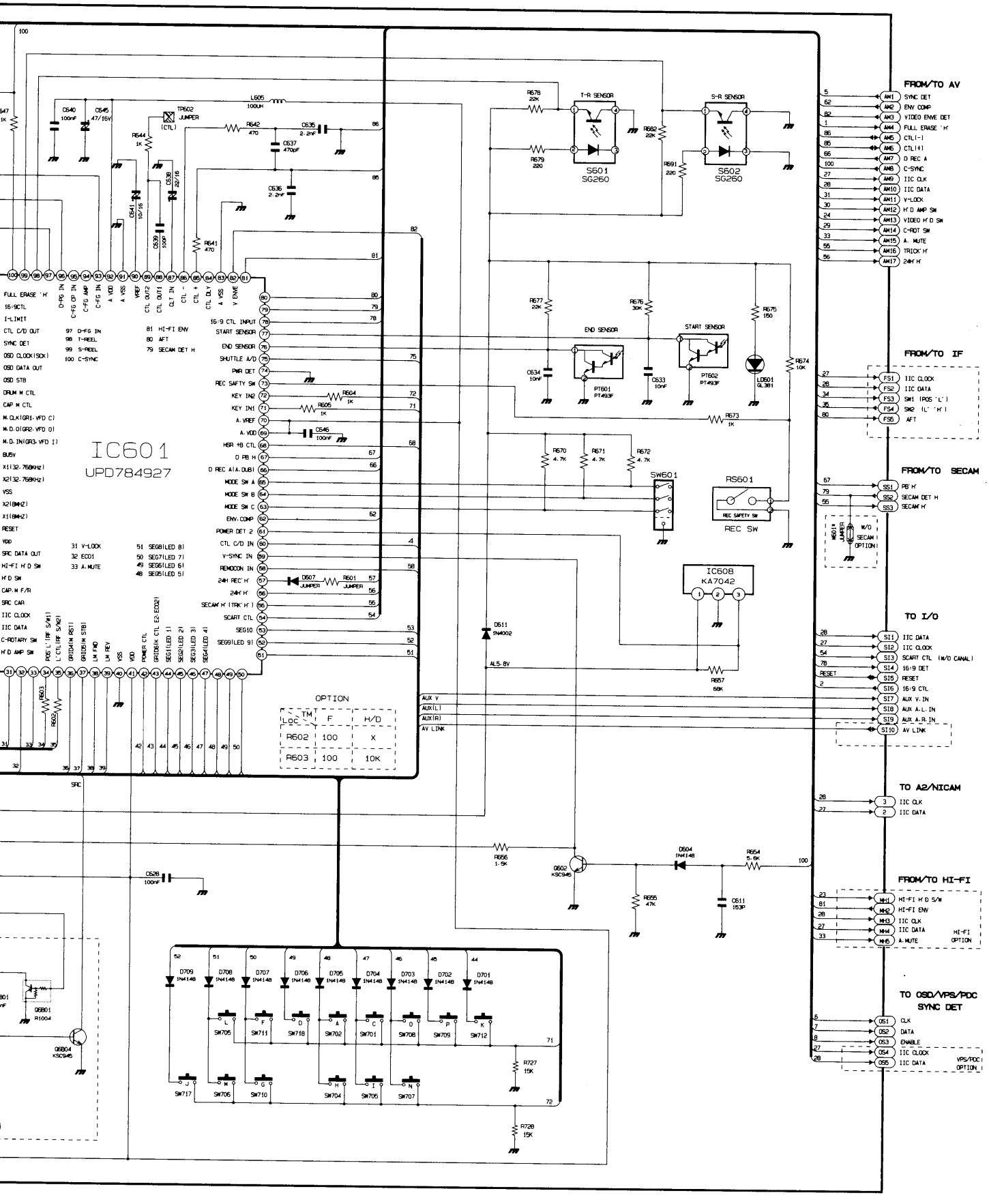



AL33V
TUNER
PC12V
D.M B+
AL9V
L.M B+
AL9V
C.M B+
HSR CTL
CAP CTL
C+ 12V
C+ 12V
ECO2 CTL
ECO2 CTL
ECO1 CTL
ECO1 CTL
PWR CTL
PWR CTL
AL5.8V
AL5.8V.CAP
PC5V
TUNER/OSD
PC5V
VIDEO/SECAM
PC5V
Hi-Fi/NICAM
AL5V
PROGRAM SWITCH
AL5V
CANAL
PC9V
Hi-Fi.NICAM
AL5V
F/TIMER.CBC
AL-33V
VFD IC
VF+
VFD
VF-
VFD
D1P103 1N4002
D1P104 1N4002
D1P105 1N4002
Q1P108 KTC3203
Q1P104 A928
R1P105 100K
R1P106 3.9K
Q1P105 R1001
R1P107 2.2K
C1P110 1/50
ZD1P06 MTZ12B
D1P116 1N4148
C1P117 1/50
Q1P109 KSC945
R1P120 2.2K
C1P113 1/50
D1P112 1N4148
Q1P110 R1003
C1P114 1/50
R1P119 2.2K
C1P103 1/50
R1P108 2.2K
Q1P101 C2328
Q1P102 C2328
Q1P103 C2328
Q1P112 A643
R1P123 100K
D1P119 1N4002
Q1P113 A643
D1P114 1N4148
ZD1P02 MTZJ5.1C
D1P101 1N4148
D1P111 1N4148
R1P125 2.2K
R1P124 100K
R1P126 2.2K
C1R105 47/16
C1R106 47/16
C1R107 47/16
D1P113 1N4002
ZD1P05* 5.6V

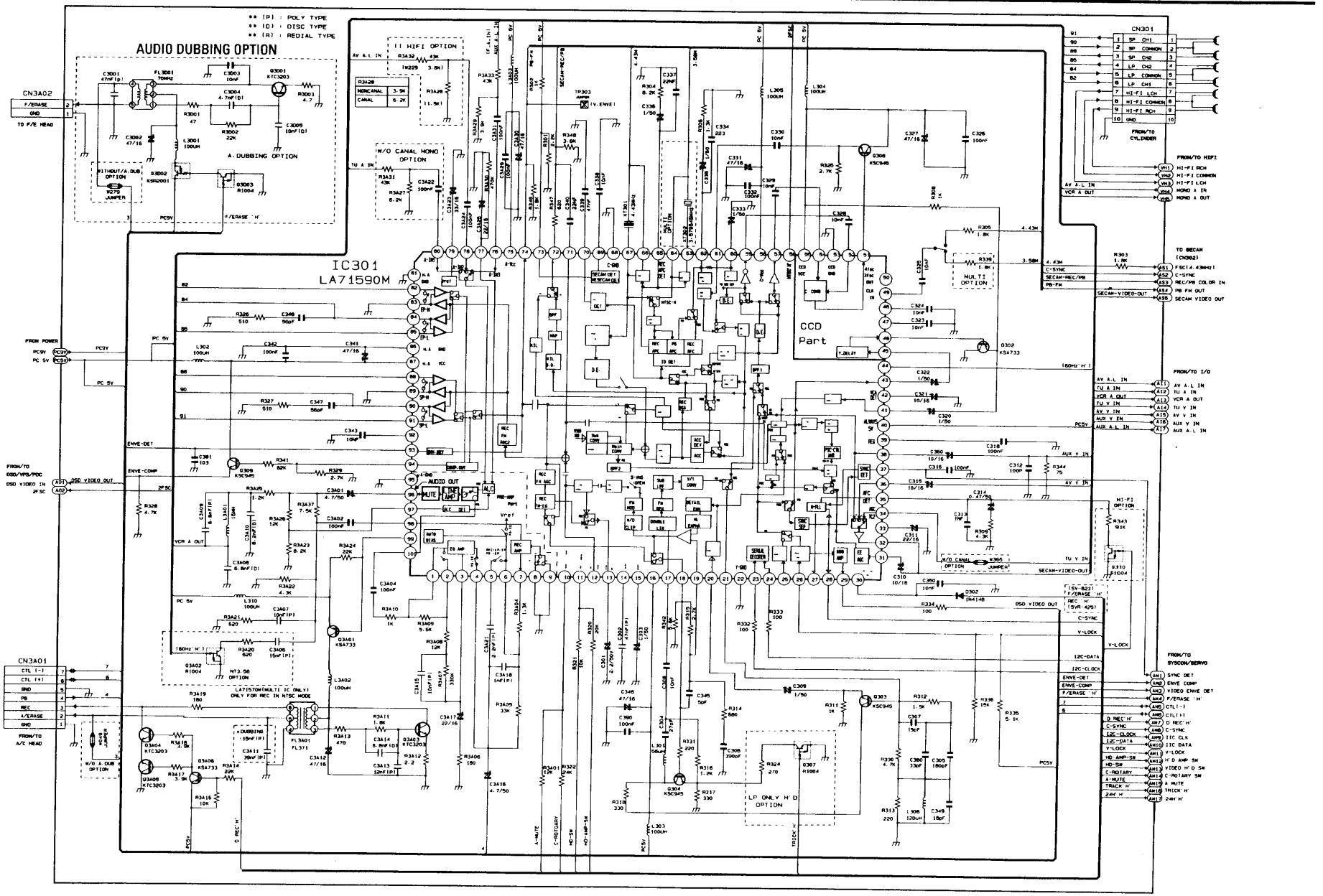
10-3 System Control/Servo



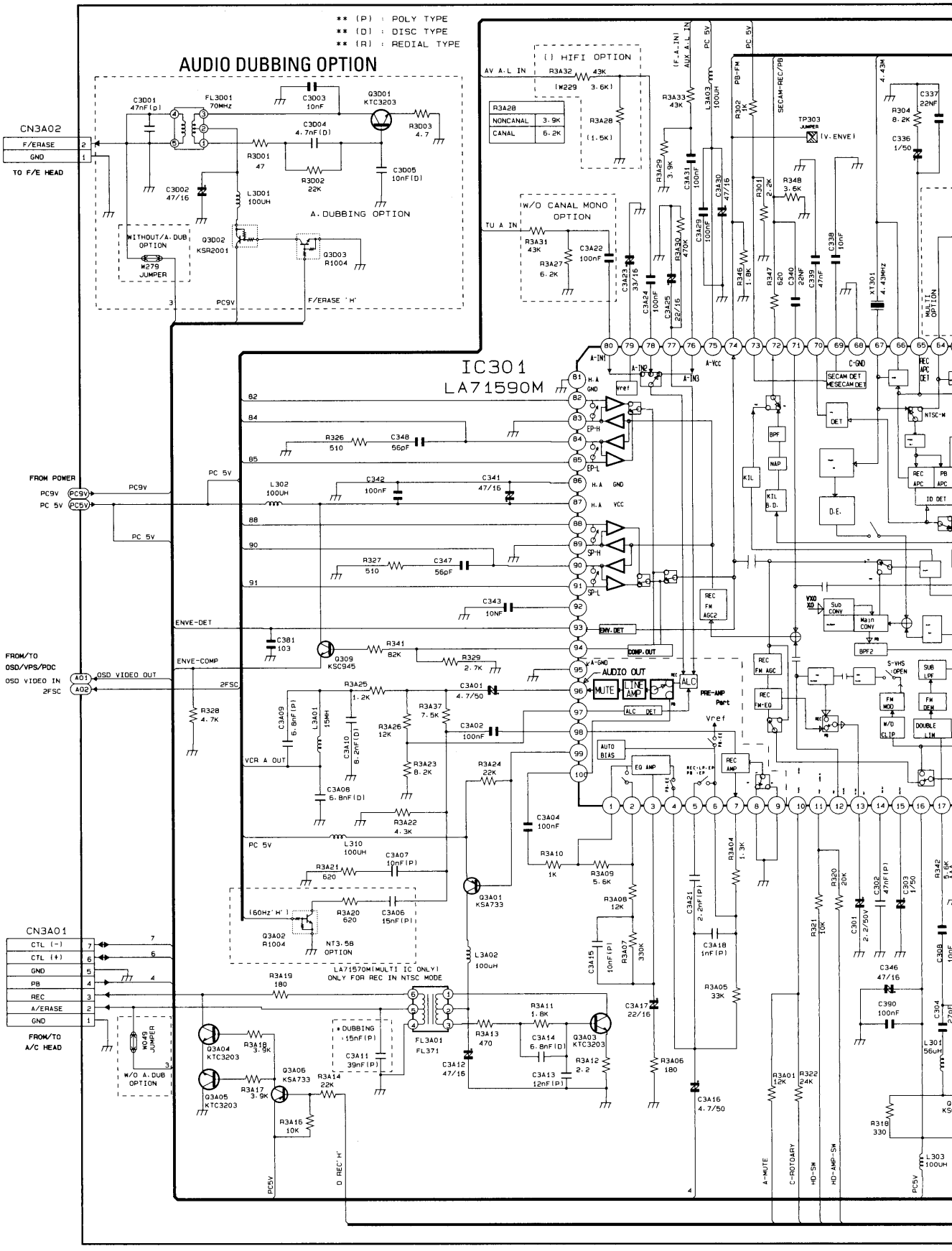

CN601
LOAD
UNLOAD
TO L/MOTOR
CN701
GND
AL5V
PC5V (SRC)
RMT
GRID1 (VFD C)
GRID2 (VFD O)
GRID3 (VFD I)
GRID4 (VFD RST)
GRID5 (VFD STB)
GRID6
FROM/TO F/TIMER
CN701
W015 JUMPER
W370 JUMPER
SRC
PC5V
IC602
KA3082
DRIVER
LOGIC
C501 100nF
C502 100nF
R650 3.9Ω(1/2W)
L601 100UH
LM +B
C503 47/16
C504 10nF
IC604
KA7533
C507 0.47/50V
R651 68K
R687 1K
D603 1N4148
C505 10nF
R652 27
C608 0.1/15.5
C510 10nF
XT601 32.768KHZ
R613 1K
XT602 8MHZ
C525 22pF
C524 22pF
C626 22pF
C527 22pF
R614 1K
IC605
24LC08B/P
A0
A1
A2
Vss
Vcc
WP
SCL
SDA
R669 100
R668 100
R667 10K
R666 10K
R660 47K
IC601
UPD784927
FULL ERASE 'H'
16-9CTL
I-LIMIT
CTL C/D OUT
SYNC DET
OSD CLOCK(SCK)
OSD DATA OUT
OSD STB
DRUM M CTL
CAP M CTL
M.CLK(GR1-VFD CI)
M.D.O(GR2-VFD DI)
M.D.IN(GR3-VFD II)
BUSY
X1(32.768KHZ)
X2(32.768KHZ)
VSS
X2(8MHZ)
X1(8MHZ)
RESET
VDD
SRC DATA OUT
HI-FI H'D SW
H'D SW
CAP.M F/R
SRC CAR
IIC CLOCK
IIC DATA
C-ROTARY SW
H'D AMP SW
D-FG IN
T-REEL
S-REEL
C-SYNC
HI-FI ENV
AFT
SECAM DET H
V-LOCK
EC01
A.MUTE
SEG8(LED 8)
SEG7(LED 7)
SEG6(LED 6)
SEG5(LED 5)
TP601 JUMPER (H'D SW)
CN702
SD
VF+
-30V
VF-
SRC
AV LINK
GND
AL5V
NC
FROM/TO F/TIMER
CN702
CN705
GND
A.IN(L)
A.IN(R)
VCC
VIDEO IN
RMT
CBC
S7
KEY1
KEY2
AUX(L)
AUX(R)
AUX V
FROM F/TIMER
CN705
CN604
GND
I-LIMIT
CM CTL
CM B+
C-FG
CAP F/R
AL5V
FROM/TO C/MOTOR
R685 33K
R661 33K
C691 10nF
D605 1N4002
C623 22NF
C512 1000/25
C628 100nF
CN3A01
CM CTL
GND
D-FG
B(12V)
D-PG
GND
PC5V
R690 56K
C682 68NF(P)
C690 68NF(P)
FROM/TO DRUM MOTOR
AL5V
PC 5V
AL 5.8V
CM +B
CM +B
LM +B
HSR CTL
PWR CTL
VF+
VF-
-30V
EC01
EC02
FROM/TO POWER
L603 100UH
L604 100UH
C621 47/25
C620 10nF
C619 10nF
C618 47/25
D613 1N4148
D620 1N4002
L6801 100UH
Q6802 R2001A
C6804 10nF
C6803 47/25
R6801 150
C6801 1nF
Q6801 R1004
R6803 150
Q6804 KSC945
Q6803 KSC945
C6802 1nF
R6802 150
CBC OPTION
D709 1N4148
SW717

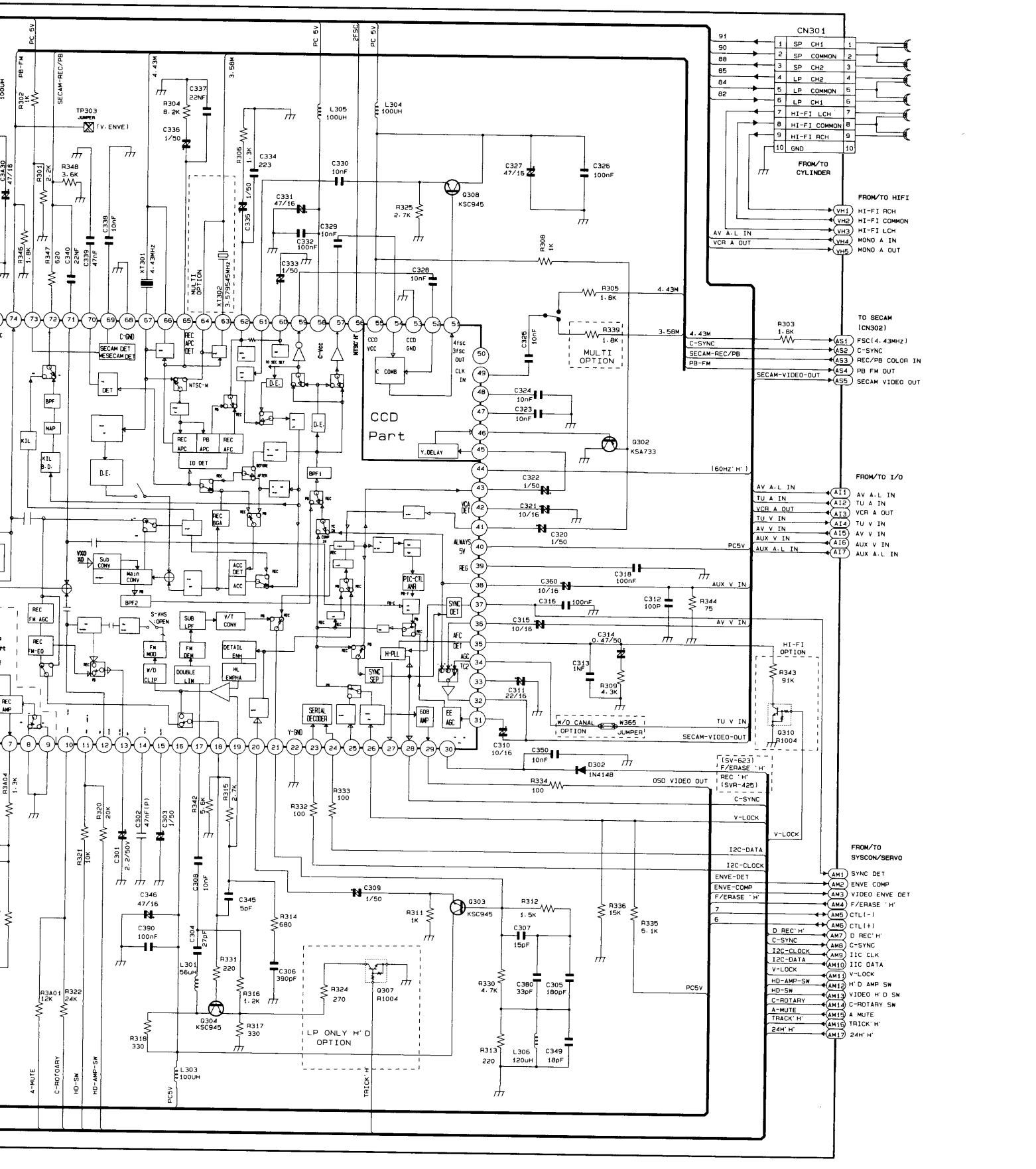

IC601
UPD784927
FULL ERASE 'H'
16-9CTL
I-LIMIT
CTL C/D OUT
SYNC DET
OSD CLOCK(SCK)
OSD DATA OUT
OSD STB
DRUM M CTL
CAP M CTL
M.CLK(GR1-VFD C)
M.D.O(GR2-VFD D)
M.D.IN(GR3-VFD I)
BU5V
X1(32.768KHz)
X2(32.768KHz)
VSS
X2(8MHZ)
X1(8MHZ)
RESET
VDD
SRC DATA OUT
HI-FI H'D SW
H'D SW
CAP.M F/R
SRC CAR
IIC CLOCK
IIC DATA
C-ROTARY SW
H'D AMP SW
D-FG IN
C-FG CP IN
C-FG AMP
C-FG IN
A VDD
A VSS
VREF
CTL OUT2
CTL OUT1
CTL IN
CTL -
CTL +
CTL DLY
A VSS
V ENVE
97 D-FG IN
98 T-REEL
99 S-REEL
100 C-SYNC
81 HI-FI ENV
80 AFT
79 SECAM DET H
16-9 CTL INPUT
START SENSOR
END SENSOR
SHUTTLE A/D
PWR DET
REC SAFTY SW
KEY IN2
KEY IN1
A VREF
A VDD
HSR +B CTL
D FB H
D REC A(A.DUB)
MODE SW A
MODE SW B
MODE SW C
ENV.COMP
POWER DET 2
CTL C/D IN
V-SYNC IN
REMOCON IN
24H REC'H'
24H'H'
SECAM'H'(TRK'H')
SCART CTL
SEG10
SEG9(LED 9)
31 V-LOCK
32 ECO1
33 A.MUTE
51 SEG8(LED 8)
50 SEG7(LED 7)
49 SEG6(LED 6)
48 SEG5(LED 5)
L605 100UH
C540 100nF
C545 47/16V
TP602 JUMPER (CTL)
R644 1K
R642 470
C635 2.2nF
C637 470pF
C636 2.2nF
C541 10/16
C538 22/16
C539 100P
R641 470
C546 100nF
R604 1K
R605 1K
D607 JUMPER
R601 JUMPER
R603
R602
OPTION
LOC | TM | F | H/D
R602 | 100 | X
R603 | 100 | 10K
R678 22K
R679 220
T-R SENSOR
S601 SG260
R692 22K
R691 220
S-R SENSOR
S602 SG260
R677 22K
R676 30K
R675 150
END SENSOR
PT601 PT493F
C634 10nF
C633 10nF
START SENSOR
PT602 PT493F
LD601 GL381
R674 10K
R673 1K
R670 4.7K
R671 4.7K
R672 4.7K
SW601
RS601
REC SAFETY SW
REC SW
IC608 KA7042
D611 1N4002
AL5.8V
R657 68K
AUX V
AUX(L)
AUX(R)
AV LINK
R656 1.5K
Q602 KSC945
D604 1N4148
R654 5.6K
R655 47K
C611 153P
C628 100nF
D709 1N4148
D708 1N4148
D707 1N4148
D706 1N4148
D705 1N4148
D704 1N4148
D703 1N4148
D702 1N4148
D701 1N4148
SW705
SW711
SW718
SW702
SW701
SW708
SW709
SW712
SW717
SW706
SW710
SW704
SW705
SW707
R727 15K
R728 15K
Q6801 KSC945
R1004
FROM/TO AV
AM1 SYNC DET
AM2 ENV COMP
AM3 VIDEO ENVE DET
AM4 FULL ERASE 'H'
AM5 CTL(-)
AM6 CTL(+)
AM7 D REC A
AM8 C-SYNC
AM9 IIC CLK
AM10 IIC DATA
AM11 V-LOCK
AM12 H'D AMP SW
AM13 VIDEO H'D SW
AM14 C-ROT SW
AM15 A. MUTE
AM16 TRICK'H'
AM17 24H'H'
FROM/TO IF
FS1 IIC CLOCK
FS2 IIC DATA
FS3 SW1 (POS 'L')
FS4 SW2 (L' 'H')
FS5 AFT
FROM/TO SECAM
SS1 PB'H'
SS2 SECAM DET H
SS3 SECAM'H'
M601 JUMPER
M/D SECAM OPTION
TO I/O
SI1 IIC DATA
SI2 IIC CLOCK
SI3 SCART CTL (M/D CANAL)
SI4 16:9 DET
SI5 RESET
SI6 16:9 CTL
SI7 AUX V-IN
SI8 AUX A-L IN
SI9 AUX A-R IN
SI10 AV LINK
TO A2/NICAM
3 IIC CLK
2 IIC DATA
FROM/TO HI-FI
MH1 HI-FI H'D S/W
MH2 HI-FI ENV
MH3 IIC CLK
MH4 IIC DATA
MH5 A.MUTE
HI-FI OPTION
TO OSD/VPS/PDC SYNC DET
OS1 CLK
OS2 DATA
OS3 ENABLE
OS4 IIC CLOCK
OS5 IIC DATA
VPS/PDC OPTION

10-4 Audio/Video

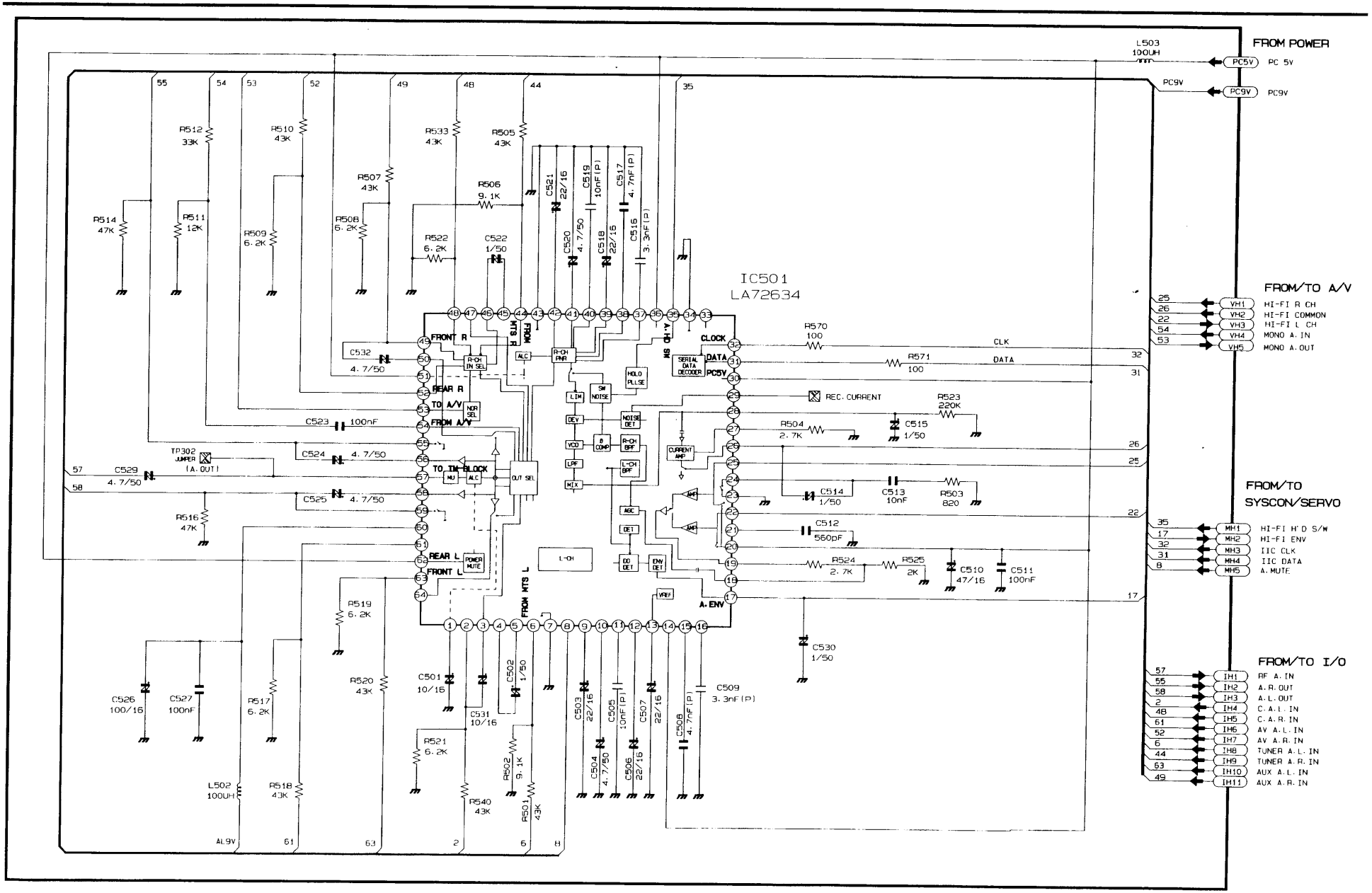


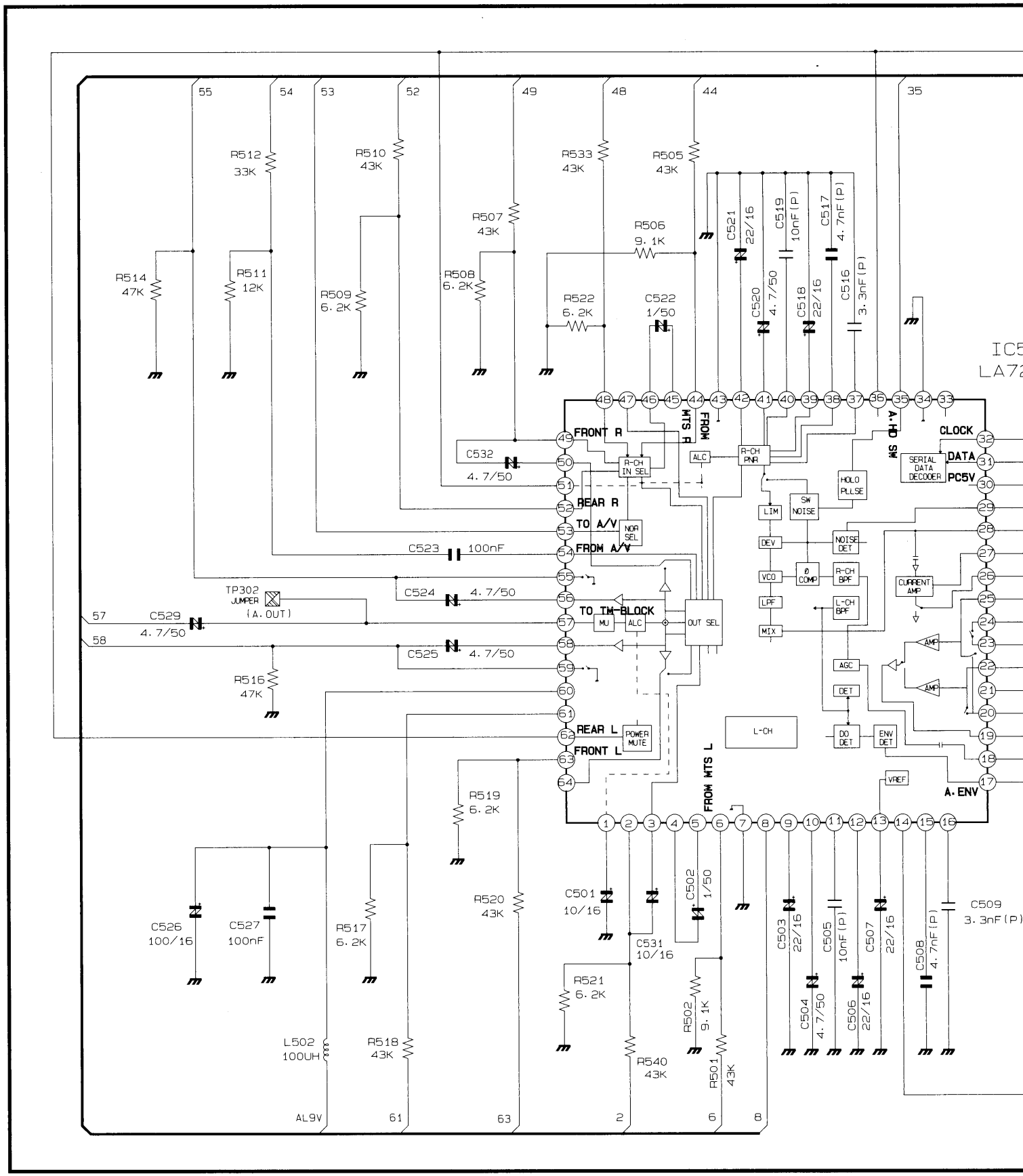
10-4 Audio/Video

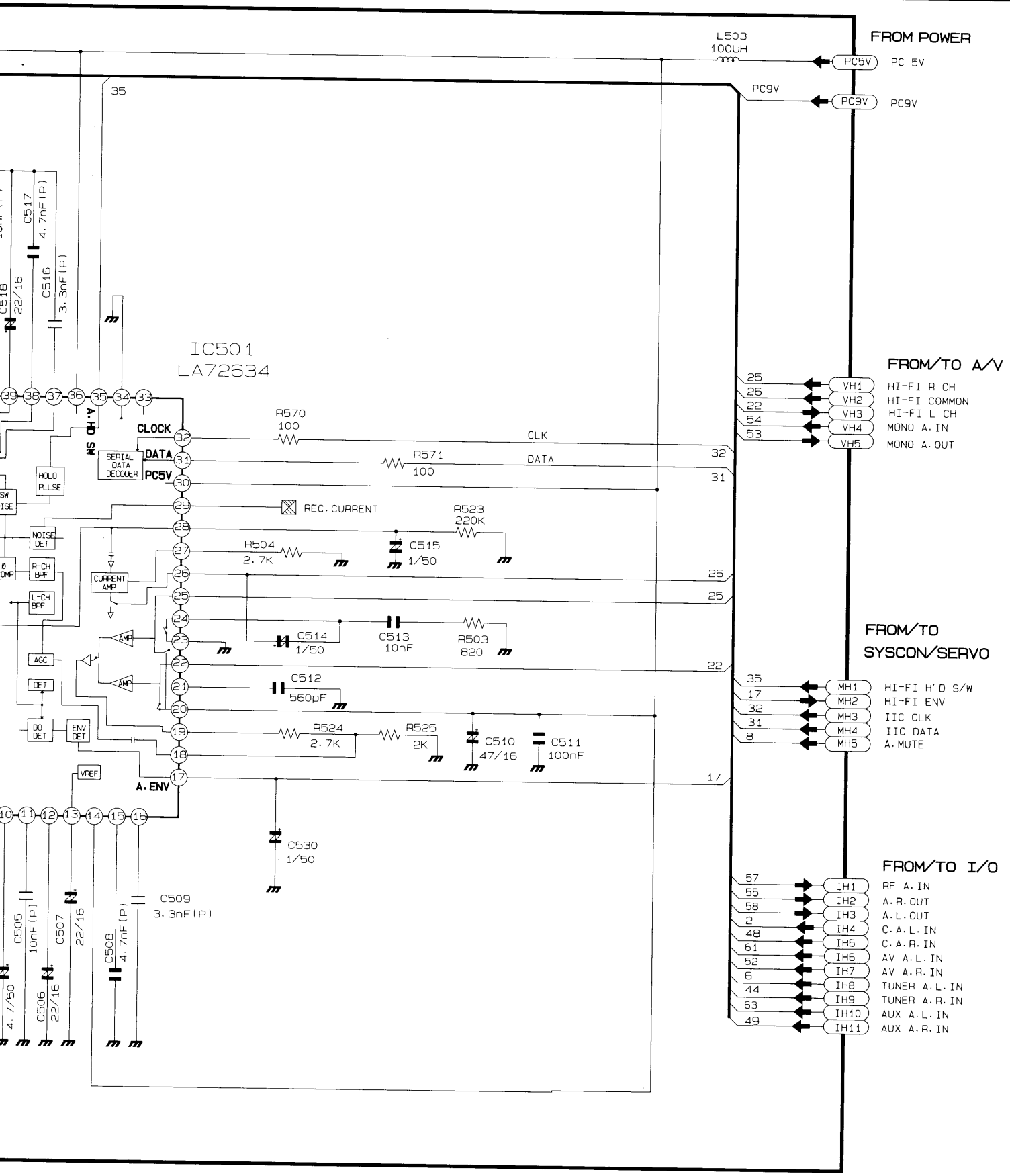



CN301
FROM/TO CYLINDER
FROM/TO HIFI
HI-FI RCH
HI-FI COMMON
HI-FI LCH
MONO A IN
MONO A OUT
AV A.L IN
VCR A OUT
TO SECAM (CN302)
FSC(4.43MHz)
C-SYNC
REC/PB COLOR IN
PB FM OUT
SECAM VIDEO OUT
SECAM-VIDEO-OUT
FROM/TO I/O
AV A.L IN
TU A IN
VCR A OUT
TU V IN
AV V IN
AUX V IN
AUX A.L IN
CCD Part
MULTI OPTION
HI-FI OPTION
W/D CANAL OPTION
JUMPER
LP ONLY H'D OPTION
OSD VIDEO OUT
FROM/TO SYSCON/SERVO
SYNC DET
ENVE COMP
VIDEO ENVE DET
F/ERASE 'H'
CTL(-)
CTL(+)
D REC'H'
C-SYNC
IIC CLK
IIC DATA
V-LOCK
H'D AMP SW
VIDEO H'D SW
C-ROTARY SW
A MUTE
TRICK'H'
24H'H'

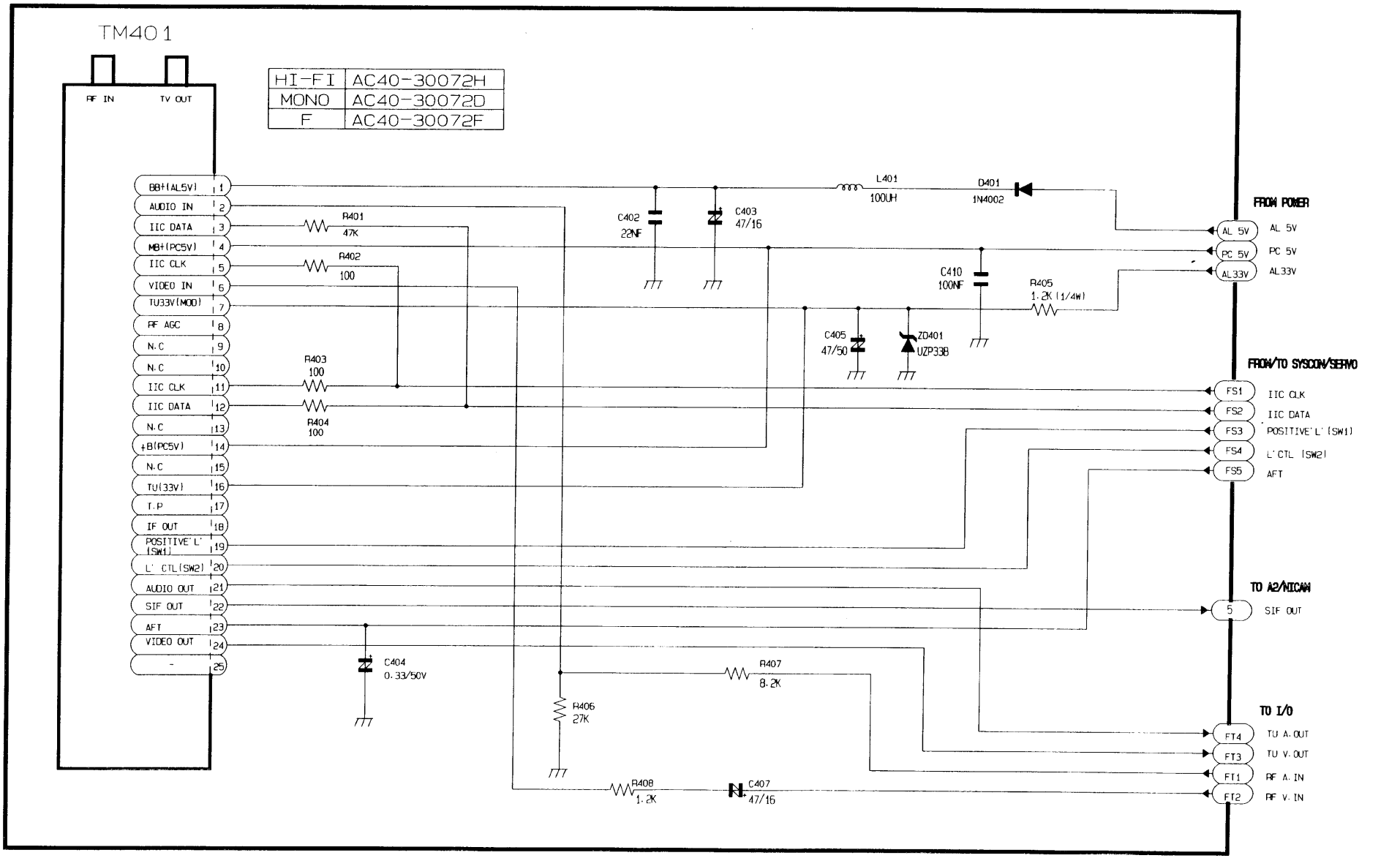
10-5 Hi-Fi


IC501
LA72634
FROM POWER
PC5V
PC 5V
PC9V
PC9V
FROM/TO A/V
HI-FI R CH
HI-FI COMMON
HI-FI L CH
MONO A. IN
MONO A. OUT
FROM/TO SYSCON/SERVO
HI-FI H'D S/W
HI-FI ENV
IIC CLK
IIC DATA
A. MUTE
FROM/TO I/O
RF A. IN
A. R. OUT
A. L. OUT
C. A. L. IN
C. A. R. IN
AV A. L. IN
AV A. R. IN
TUNER A. L. IN
TUNER A. R. IN
AUX A. L. IN
AUX A. R. IN
L503 100UH
L502 100UH
FRONT R
REAR R
REAR L
FRONT L
TO A/V
FROM A/V
TO TK BLOCK
FROM MTS L
FROM MTS R
CLOCK
DATA
CLK
REC. CURRENT
A. ENV
TP302 JUMPER (A. OUT)
R512 33K
R510 43K
R533 43K
R505 43K
R507 43K
R506 9.1K
R514 47K
R511 12K
R509 6.2K
R508 6.2K
R522 6.2K
C522 1/50
C521 22/16
C520 4.7/50
C519 10nF(P)
C518 22/16
C517 4.7nF(P)
C516 3.3nF(P)
C532 4.7/50
C523 100nF
C524 4.7/50
C529 4.7/50
C525 4.7/50
R516 47K
R519 6.2K
R520 43K
R517 6.2K
R521 6.2K
R540 43K
R502 9.1K
R501 43K
R518 43K
C501 10/16
C502 1/50
C531 10/16
C503 22/16
C504 4.7/50
C505 10nF(P)
C506 22/16
C507 22/16
C508 4.7nF(P)
C509 3.3nF(P)
C530 1/50
C526 100/16
C527 100nF
R570 100
R571 100
R504 2.7K
R523 220K
C515 1/50
C514 1/50
C513 10nF
R503 820
C512 560pF
R524 2.7K
R525 2K
C510 47/16
C511 100nF

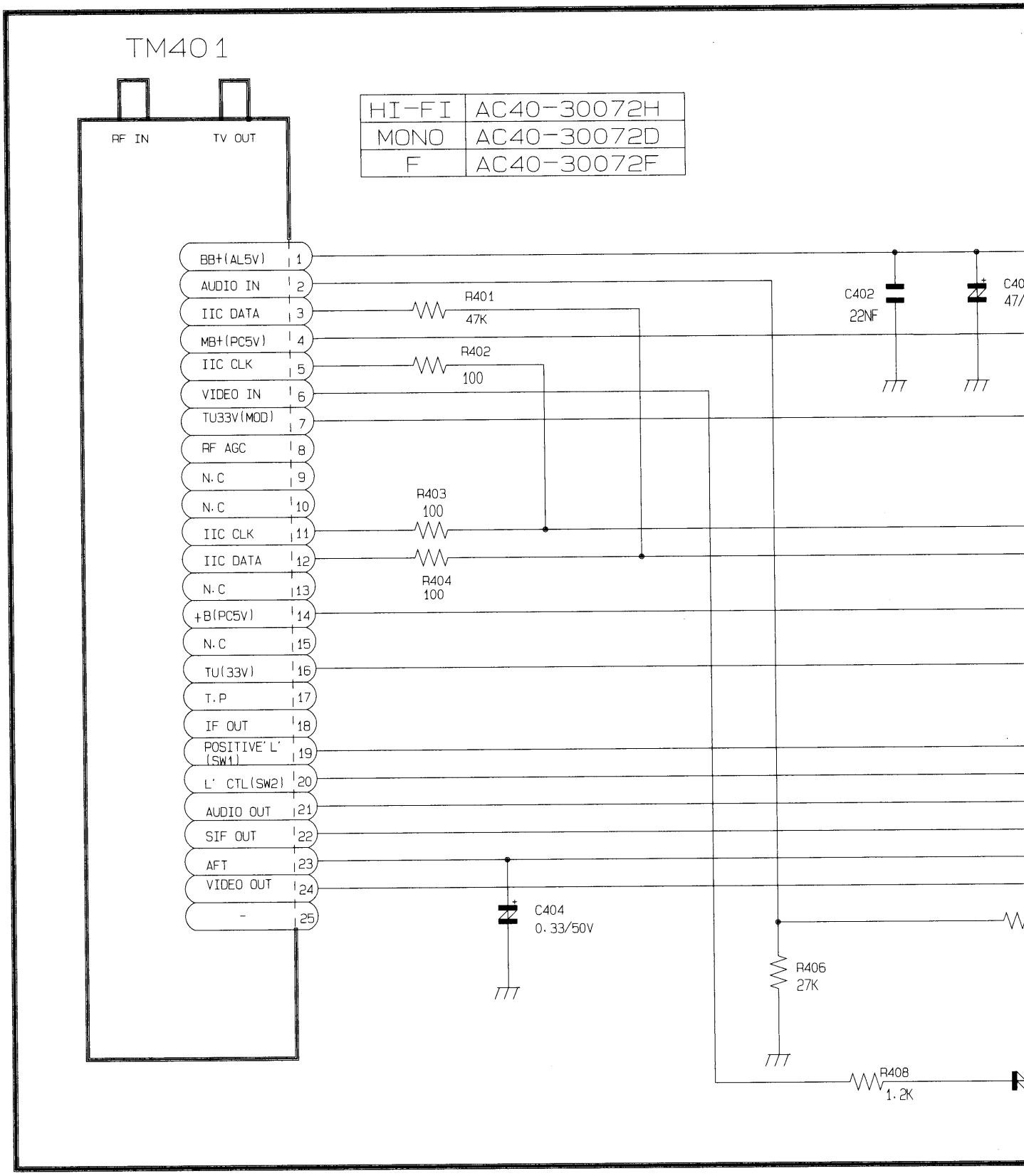

R512 33K
R510 43K
R533 43K
R505 43K
R507 43K
R506 9.1K
R514 47K
R511 12K
R509 6.2K
R508 6.2K
R522 6.2K
C522 1/50
C521 22/16
C519 10nF(P)
C517 4.7nF(P)
C520 4.7/50
C518 22/16
C516 3.3nF(P)
FRONT R
REAR R
TO A/V
FROM A/V
C532 4.7/50
C523 100nF
C524 4.7/50
C529 4.7/50
C525 4.7/50
TP302 JUMPER (A.OUT)
R516 47K
REAR L
FRONT L
POWER MUTE
TO TM-BLOCK
FROM MTS R
FROM MTS L
R-CH IN SEL
NOR SEL
MU
ALC
OUT SEL
R-CH PWR
HOLD PULSE
SW NOISE
LIM
DEV
VCO
LPF
MIX
NOISE DET
Ø COMP
R-CH BPF
L-CH BPF
CURRENT AMP
AGC
DET
DO DET
ENV DET
L-CH
VREF
A.ENV
A.HD SW
SERIAL DATA DECODER
CLOCK
DATA
PC5V
R519 6.2K
R520 43K
R517 6.2K
R521 6.2K
R540 43K
R502 9.1K
R501 43K
R518 43K
L502 100UH
C526 100/16
C527 100nF
C501 10/16
C531 10/16
C502 1/50
C503 22/16
C504 4.7/50
C505 10nF(P)
C506 22/16
C507 22/16
C508 4.7nF(P)
C509 3.3nF(P)
AL9V

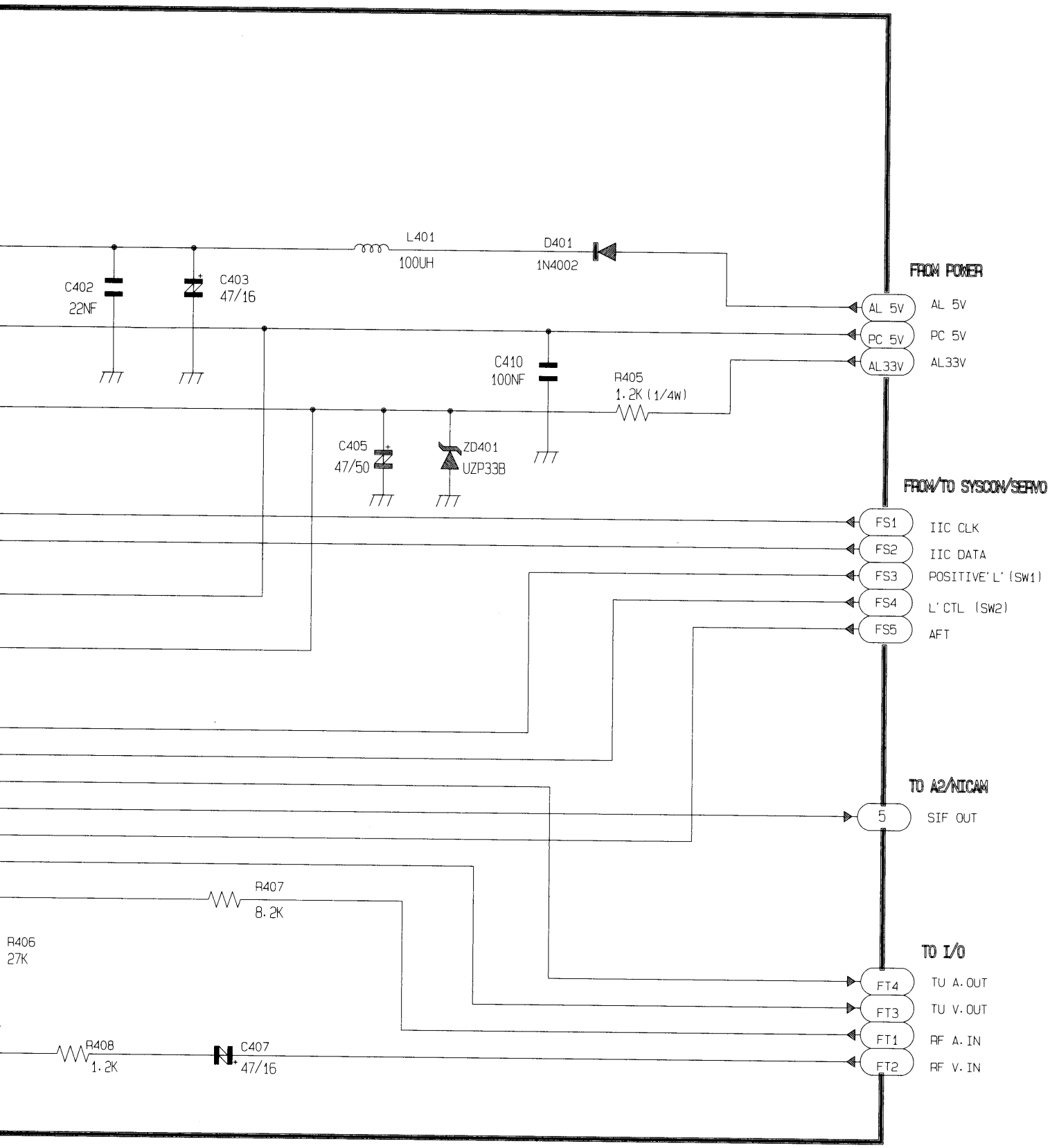

FROM POWER
L503
100UH
PC5V
PC 5V
PC9V
PC9V
IC501
LA72634
FROM/TO A/V
VH1
HI-FI R CH
VH2
HI-FI COMMON
VH3
HI-FI L CH
VH4
MONO A.IN
VH5
MONO A.OUT
CLOCK
DATA
PC5V
SERIAL DATA DECODER
A.HD SW
HOLD PLLSE
R570
100
R571
100
CLK
DATA
REC. CURRENT
R523
220K
R504
2.7K
C515
1/50
CURRENT AMP
C514
1/50
C513
10nF
R503
820
C512
560pF
R524
2.7K
R525
2K
C510
47/16
C511
100nF
NOISE DET
R-CH BPF
L-CH BPF
AGC
DET
DO DET
ENV DET
AMP
VREF
A.ENV
C530
1/50
C509
3.3nF(P)
C505
10nF(P)
C507
22/16
C508
4.7nF(P)
C506
22/16
C517
4.7nF(P)
C516
3.3nF(P)
C518
22/16
FROM/TO SYSCON/SERVO
MH1
HI-FI H'D S/W
MH2
HI-FI ENV
MH3
IIC CLK
MH4
IIC DATA
MH5
A.MUTE
FROM/TO I/O
IH1
RF A.IN
IH2
A.R.OUT
IH3
A.L.OUT
IH4
C.A.L.IN
IH5
C.A.R.IN
IH6
AV A.L.IN
IH7
AV A.R.IN
IH8
TUNER A.L.IN
IH9
TUNER A.R.IN
IH10
AUX A.L.IN
IH11
AUX A.R.IN

10-6 TM-Block

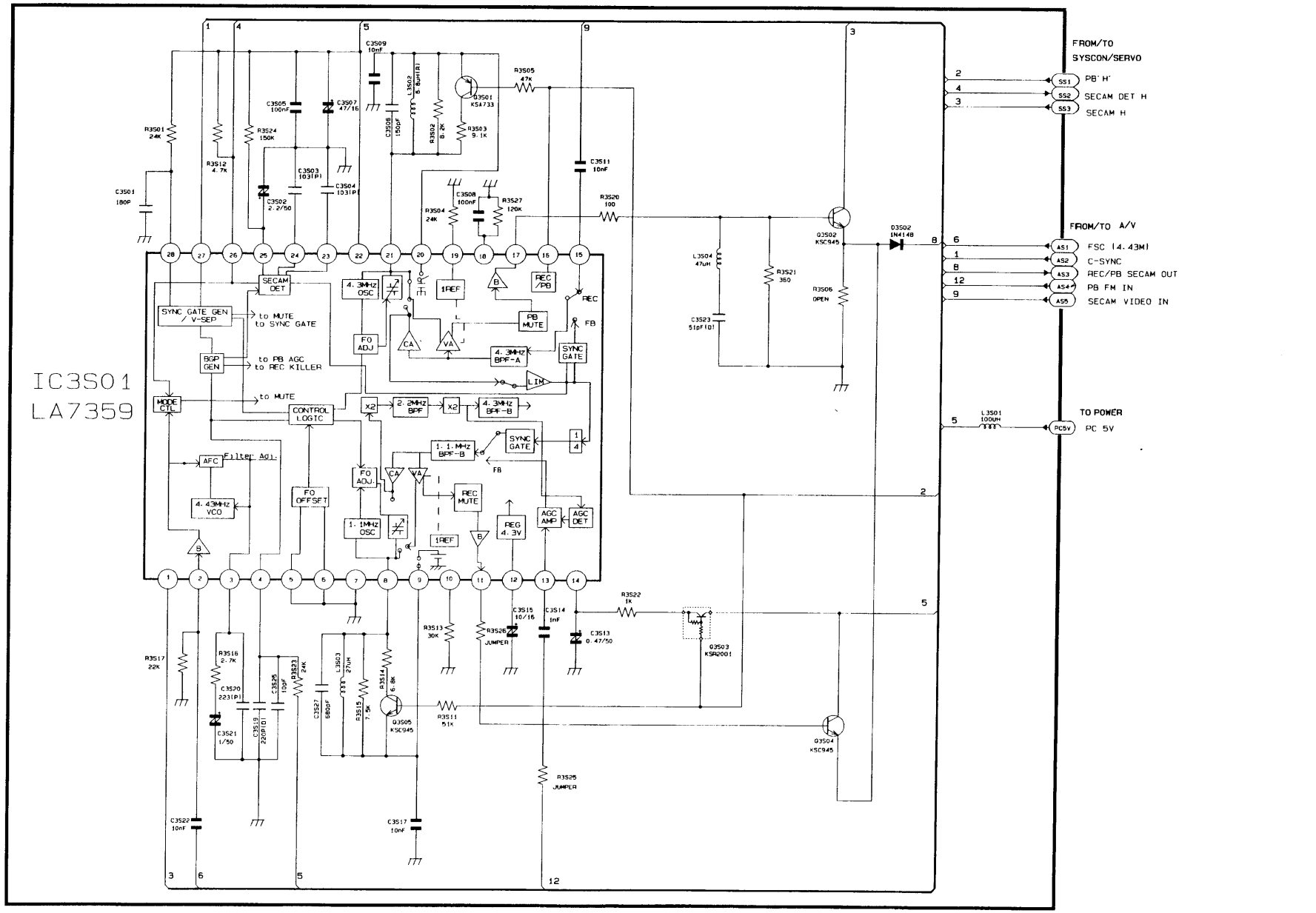

TM401
RF IN
TV OUT
HI-FI AC40-30072H
MONO AC40-30072D
F AC40-30072F
BB+(AL5V) 1
AUDIO IN 2
IIC DATA 3
MB+(PC5V) 4
IIC CLK 5
VIDEO IN 6
TU33V(MOD) 7
RF AGC 8
N.C 9
N.C 10
IIC CLK 11
IIC DATA 12
N.C 13
+B(PC5V) 14
N.C 15
TU(33V) 16
T.P 17
IF OUT 18
POSITIVE'L' (SW1) 19
L' CTL(SW2) 20
AUDIO OUT 21
SIF OUT 22
AFT 23
VIDEO OUT 24
- 25
R401 47K
R402 100
R403 100
R404 100
C402 22NF
C403 47/16
L401 100UH
D401 1N4002
C410 100NF
R405 1.2K (1/4W)
C405 47/50
ZD401 UZP33B
C404 0.33/50V
R406 27K
R407 8.2K
R408 1.2K
C407 47/16
FROM POWER
AL 5V
PC 5V
AL33V
FROM/TO SYSCON/SERVO
FS1 IIC CLK
FS2 IIC DATA
FS3 POSITIVE'L' (SW1)
FS4 L' CTL (SW2)
FS5 AFT
TO A2/NICAM
5 SIF OUT
TO I/O
FT4 TU A. OUT
FT3 TU V. OUT
FT1 RF A. IN
FT2 RF V. IN

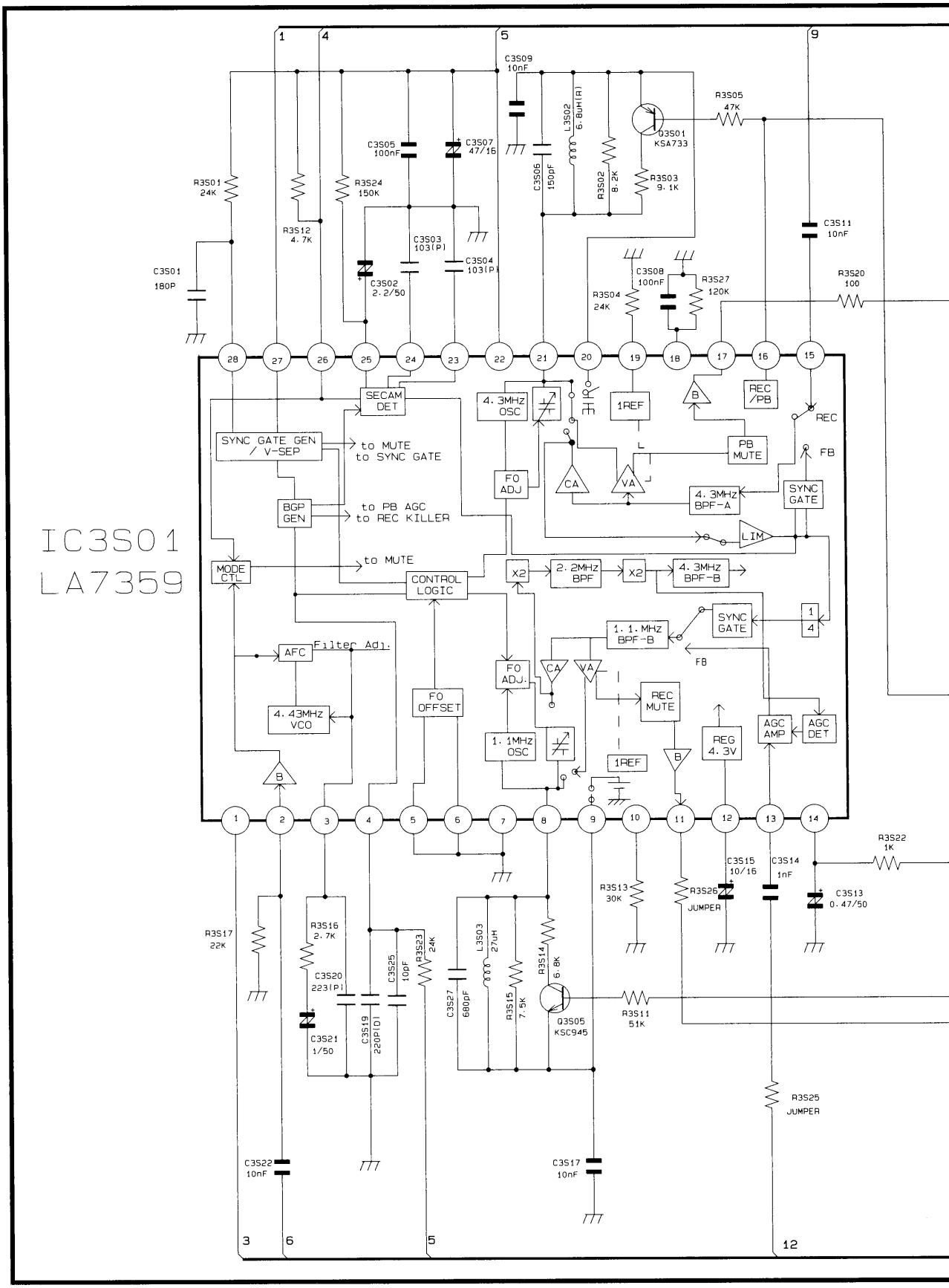
10-6 TM-Block

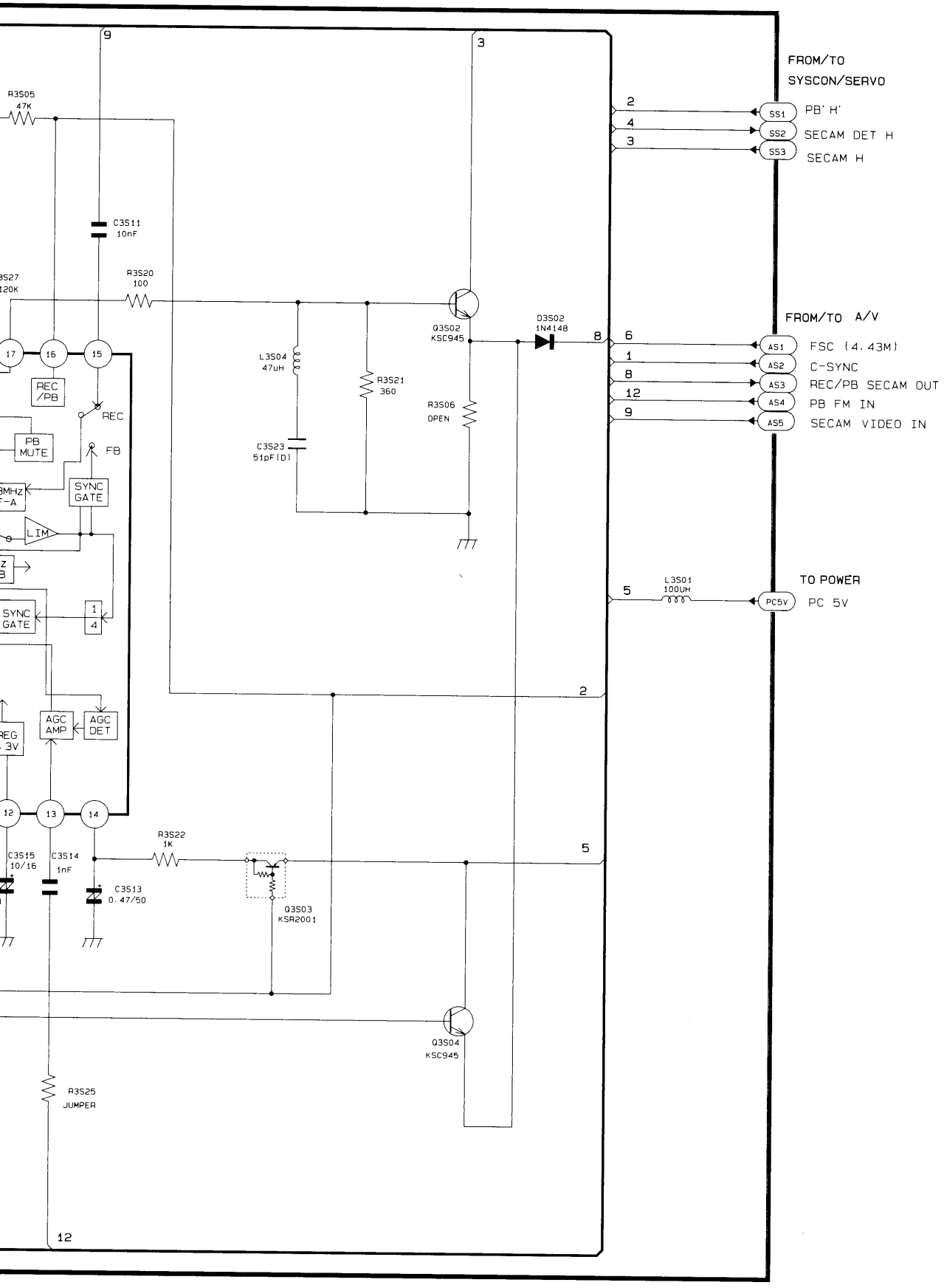

TM401
RF IN
TV OUT
HI-FI AC40-30072H
MONO AC40-30072D
F AC40-30072F
BB+(AL5V) 1
AUDIO IN 2
IIC DATA 3
MB+(PC5V) 4
IIC CLK 5
VIDEO IN 6
TU33V(MOD) 7
RF AGC 8
N.C 9
N.C 10
IIC CLK 11
IIC DATA 12
N.C 13
+B(PC5V) 14
N.C 15
TU(33V) 16
T.P 17
IF OUT 18
POSITIVE'L' (SW1) 19
L' CTL(SW2) 20
AUDIO OUT 21
SIF OUT 22
AFT 23
VIDEO OUT 24
- 25
R401 47K
R402 100
R403 100
R404 100
C402 22NF
C404 0.33/50V
R406 27K
R408 1.2K


L401
100UH
D401
1N4002
C402
22NF
C403
47/16
C410
100NF
R405
1.2K (1/4W)
C405
47/50
ZD401
UZP33B
R407
8.2K
R406
27K
R408
1.2K
C407
47/16
FROM POWER
AL 5V
PC 5V
AL33V
FROM/TO SYSCON/SERVO
FS1
FS2
FS3
FS4
FS5
IIC CLK
IIC DATA
POSITIVE'L' (SW1)
L'CTL (SW2)
AFT
TO A2/NICAM
5
SIF OUT
TO I/O
FT4
FT3
FT1
FT2
TU A.OUT
TU V.OUT
RF A.IN
RF V.IN

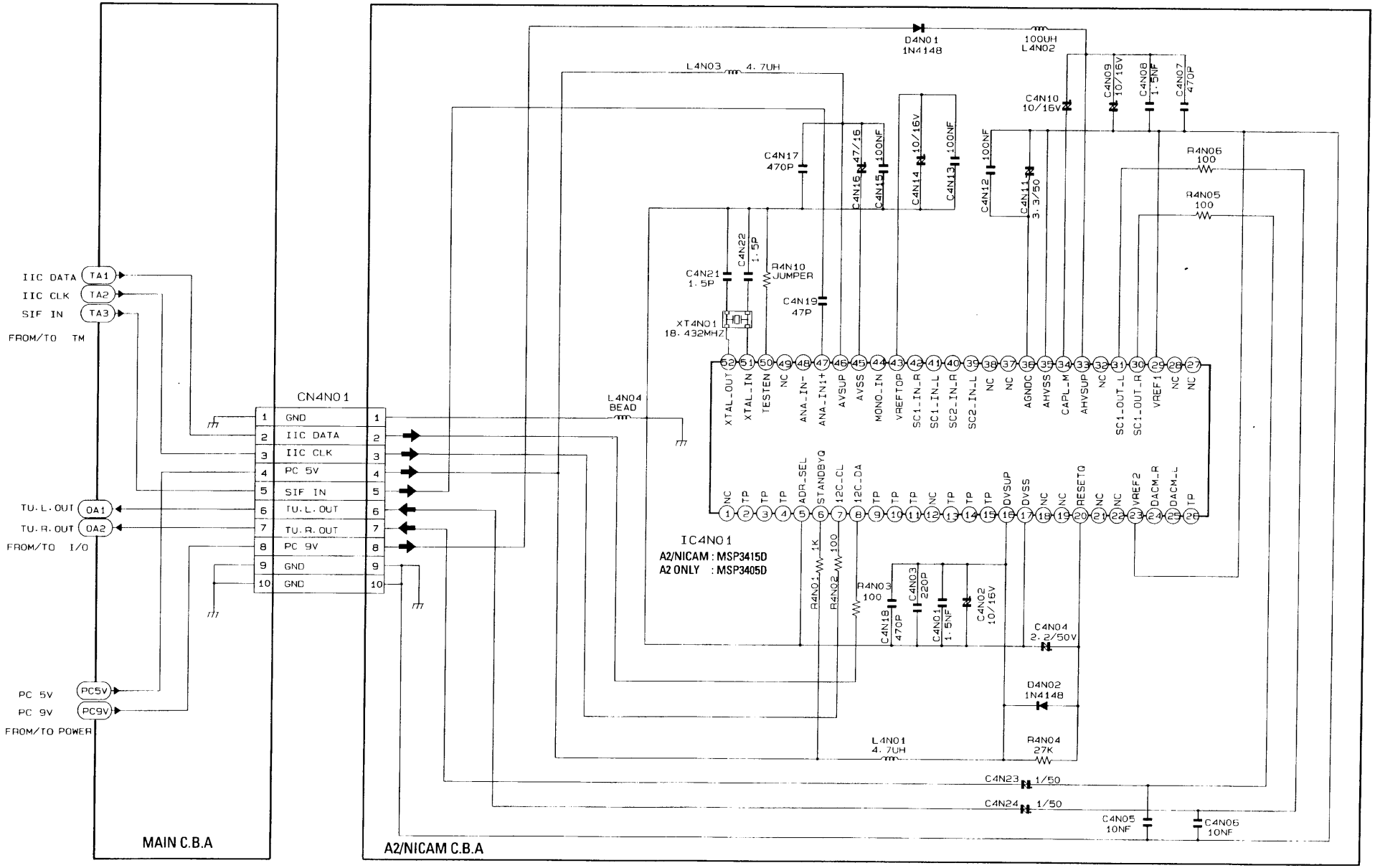
10-7 SECAM


IC3S01
LA7359
FROM/TO
SYSCON/SERVO
PB' H'
SECAM DET H
SECAM H
FROM/TO A/V
FSC (4.43M)
C-SYNC
REC/PB SECAM OUT
PB FM IN
SECAM VIDEO IN
TO POWER
PC 5V
SECAM DET
SYNC GATE GEN / V-SEP
to MUTE
to SYNC GATE
BGP GEN
to PB AGC
to REC KILLER
to MUTE
MODE CTL
CONTROL LOGIC
4.3MHz OSC
1REF
REC/PB
REC
PB MUTE
FB
FO ADJ
CA
VA
4.3MHz BPF-A
SYNC GATE
LIM
X2
2.2MHz BPF
X2
4.3MHz BPF-B
1.1MHz BPF-B
SYNC GATE
1/4
AFC
Filter Adj.
FO ADJ.
FO OFFSET
4.43MHz VCO
1.1MHz OSC
REC MUTE
REG 4.3V
AGC AMP
AGC DET
Q3501 KSA733
Q3502 KSC945
Q3503 KSA2001
Q3504 KSC945
Q3505 KSC945
D3502 1N4148
L3501 100uH
L3502 6.8uH(R)
L3503 27uH
L3504 47uH
R3501 24K
R3502 6.8K
R3503 9.1K
R3504 24K
R3505 47K
R3506 OPEN
R3511 51K
R3512 4.7K
R3513 30K
R3514 6.8K
R3515 7.5K
R3516 2.7K
R3517 22K
R3518 220P(D)
R3520 100
R3521 360
R3522 1K
R3523 24K
R3524 150K
R3525 JUMPER
R3526 JUMPER
R3527 120K
C3501 180P
C3502 2.2/50
C3503 103(P)
C3504 103(P)
C3505 100nF
C3507 47/16
C3508 100nF
C3509 10nF
C3511 10nF
C3513 0.47/50
C3514 1nF
C3515 10/16
C3517 10nF
C3518 220P(D)
C3519 2231P
C3520 2231P
C3521 1/50
C3522 10nF
C3523 51pF(D)
C3525 10pF
C3527 680pF
SS1
SS2
SS3
AS1
AS2
AS3
AS4
AS5
PC5V

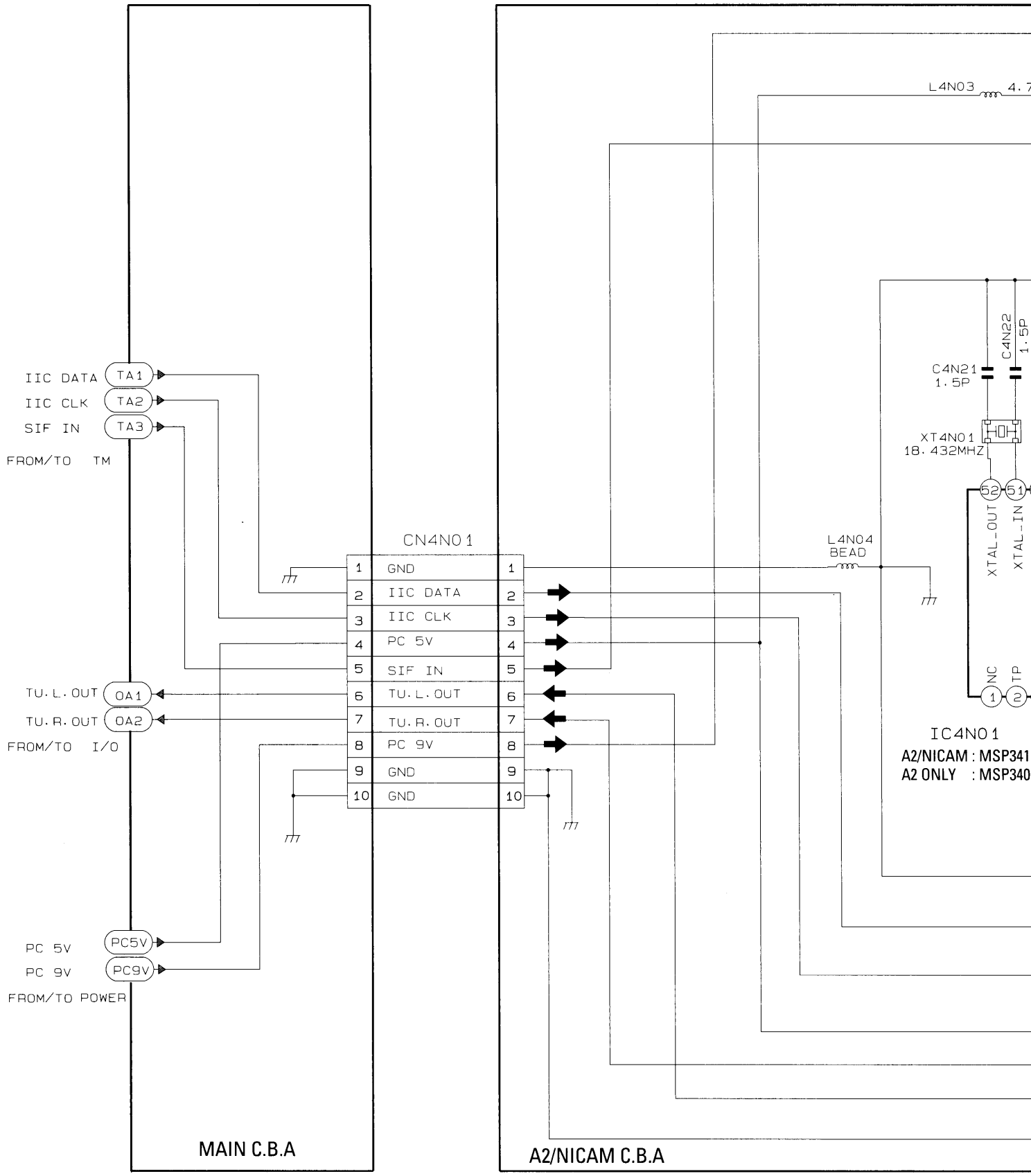

IC3S01
LA7359
SECAM DET
SYNC GATE GEN / V-SEP
to MUTE
to SYNC GATE
BGP GEN
to PB AGC
to REC KILLER
to MUTE
MODE CTL
CONTROL LOGIC
4.3MHz OSC
1REF
REC /PB
REC
PB MUTE
FB
FO ADJ
CA
VA
4.3MHz BPF-A
SYNC GATE
LIM
X2
2.2MHz BPF
X2
4.3MHz BPF-B
1.1MHz BPF-B
SYNC GATE
1/4
AFC
Filter Adj.
4.43MHz VCO
FO OFFSET
FO ADJ.
CA
VA
REC MUTE
1.1MHz OSC
1REF
REG 4.3V
AGC AMP
AGC DET
C3S09 10nF
C3S05 100nF
C3S07 47/16
C3S06 150pF
L3S02 6.8uH(R)
R3S05 47K
Q3S01 KSA733
R3S01 24K
R3S24 150K
R3S12 4.7K
R3S02 8.2K
R3S03 9.1K
C3S03 103(P)
C3S04 103(P)
C3S02 2.2/50
C3S01 180P
C3S11 10nF
R3S20 100
C3S08 100nF
R3S27 120K
R3S04 24K
R3S22 1K
C3S15 10/16
C3S14 1nF
C3S13 0.47/50
R3S26 JUMPER
R3S13 30K
R3S17 22K
R3S16 2.7K
C3S20 223(P)
C3S21 1/50
C3S19 220P(D)
C3S25 10pF
R3S23 24K
C3S27 680pF
L3S03 27uH
R3S15 7.5K
R3S14 6.8K
Q3S05 KSC945
R3S11 51K
R3S25 JUMPER
C3S22 10nF
C3S17 10nF

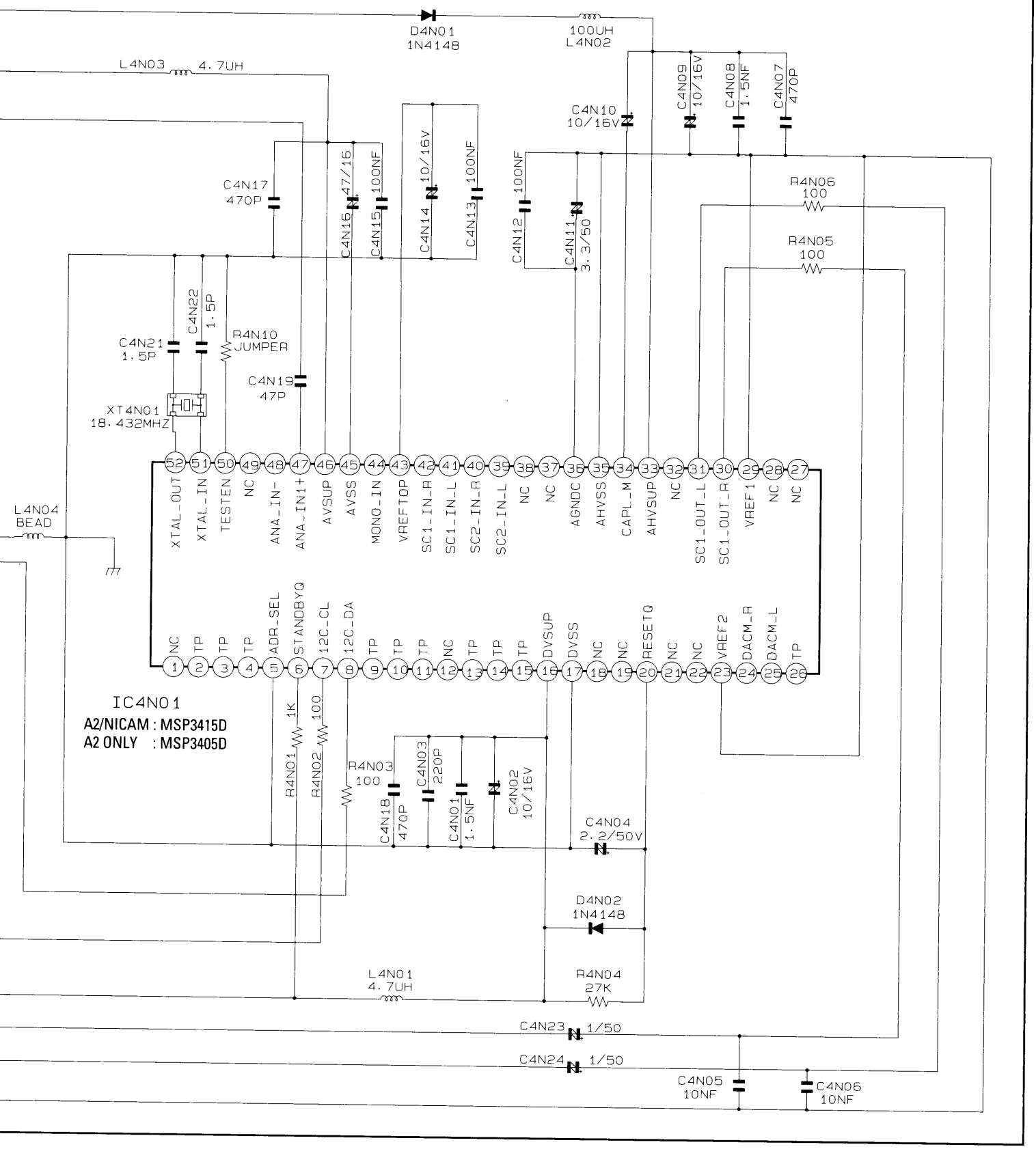

FROM/TO
SYSCON/SERVO
SS1
PB' H'
SS2
SECAM DET H
SS3
SECAM H
FROM/TO A/V
AS1
FSC (4.43M)
AS2
C-SYNC
AS3
REC/PB SECAM OUT
AS4
PB FM IN
AS5
SECAM VIDEO IN
TO POWER
PC5V
PC 5V
R3S05
47K
C3S11
10nF
R3S20
100
Q3S02
KSC945
D3S02
1N4148
L3S04
47uH
R3S21
360
R3S06
OPEN
C3S23
51pF(D)
REC
/PB
REC
FB
PB
MUTE
SYNC
GATE
LIM
SYNC
GATE
AGC
AMP
AGC
DET
L3S01
100UH
R3S22
1K
C3S15
10/16
C3S14
1nF
C3S13
0.47/50
Q3S03
KSA2001
Q3S04
KSC945
R3S25
JUMPER

10-8 A2/NICAM

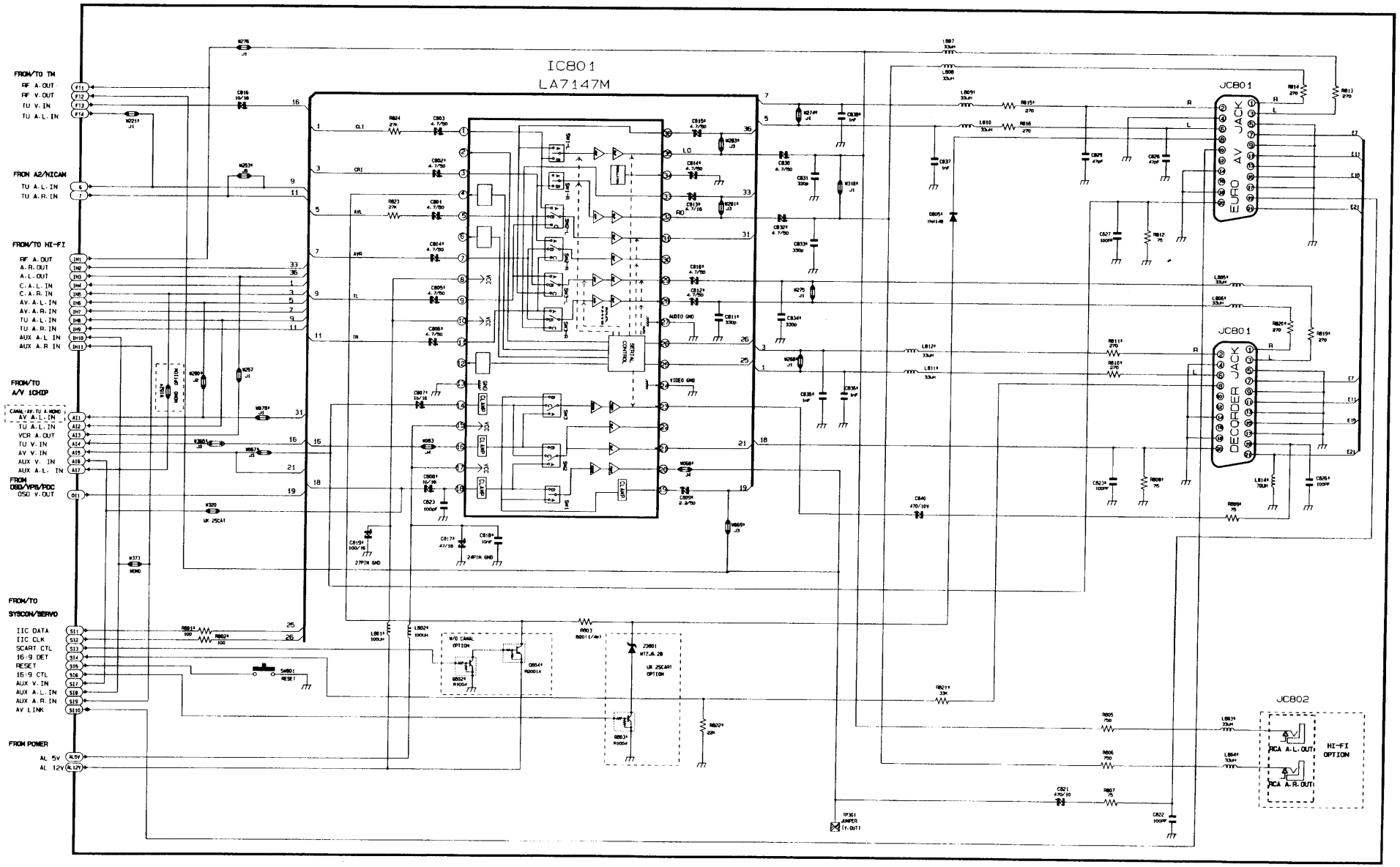

IIC DATA
IIC CLK
SIF IN
FROM/TO TM
TU.L.OUT
TU.R.OUT
FROM/TO I/O
PC 5V
PC 9V
FROM/TO POWER
CN4N01
GND
IIC DATA
IIC CLK
PC 5V
SIF IN
TU.L.OUT
TU.R.OUT
PC 9V
GND
GND
MAIN C.B.A
A2/NICAM C.B.A
IC4N01
A2/NICAM : MSP3415D
A2 ONLY : MSP3405D
D4N01 1N4148
100UH L4N02
L4N03 4.7UH
C4N10 10/16V
C4N09 10/16V
C4N08 1.5NF
C4N07 470P
C4N17 470P
C4N16 47/16
C4N15 100NF
C4N14 10/16V
C4N13 100NF
C4N12 100NF
C4N11 3.3/50
R4N06 100
R4N05 100
C4N22 1.5P
C4N21 1.5P
R4N10 JUMPER
C4N19 47P
XT4N01 18.432MHZ
L4N04 BEAD
R4N01 1K
R4N02 100
R4N03 100
C4N18 470P
C4N03 220P
C4N01 1.5NF
C4N02 10/16V
C4N04 2.2/50V
D4N02 1N4148
R4N04 27K
L4N01 4.7UH
C4N23 1/50
C4N24 1/50
C4N05 10NF
C4N06 10NF

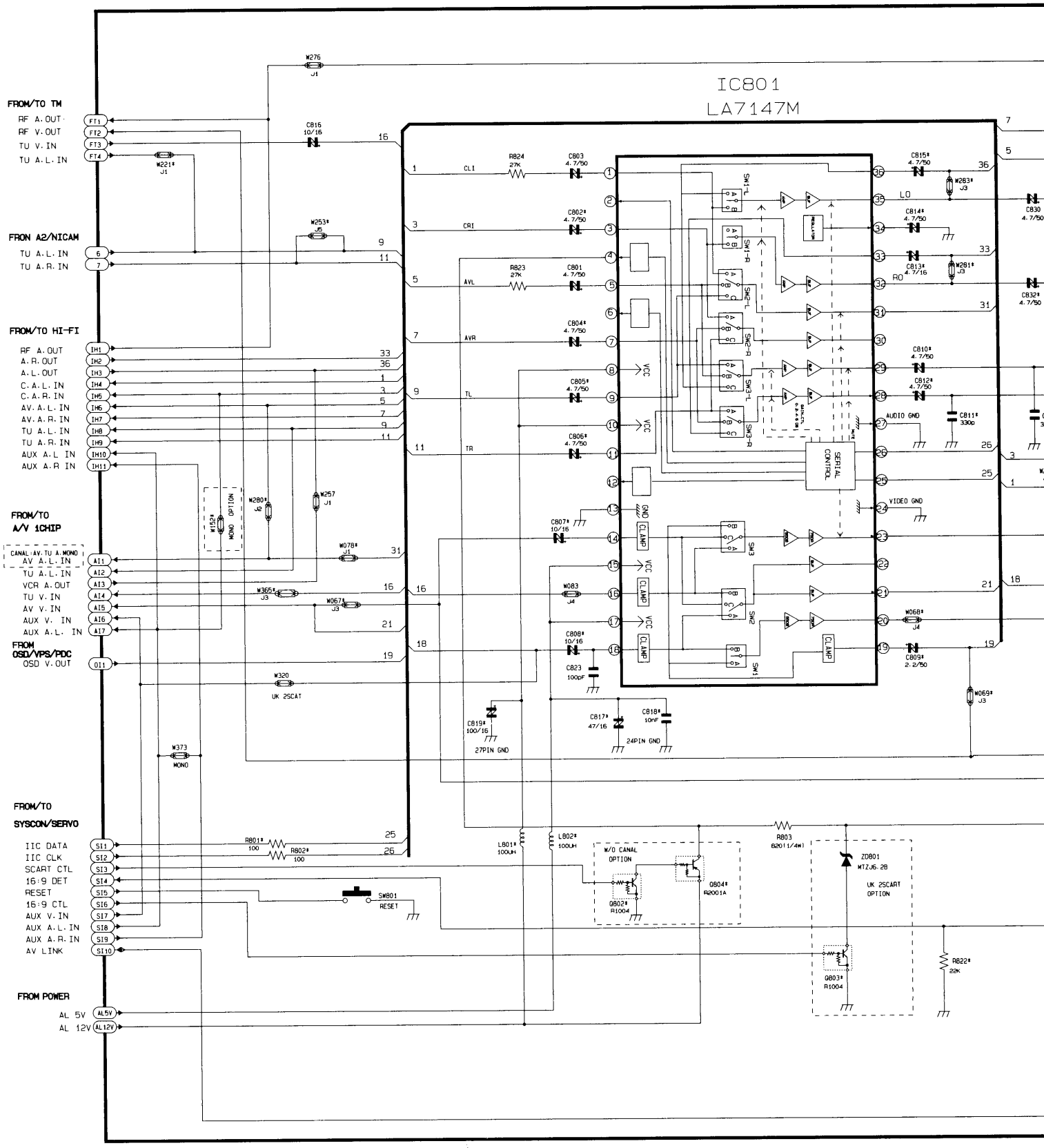
10-8 A2/NICAM

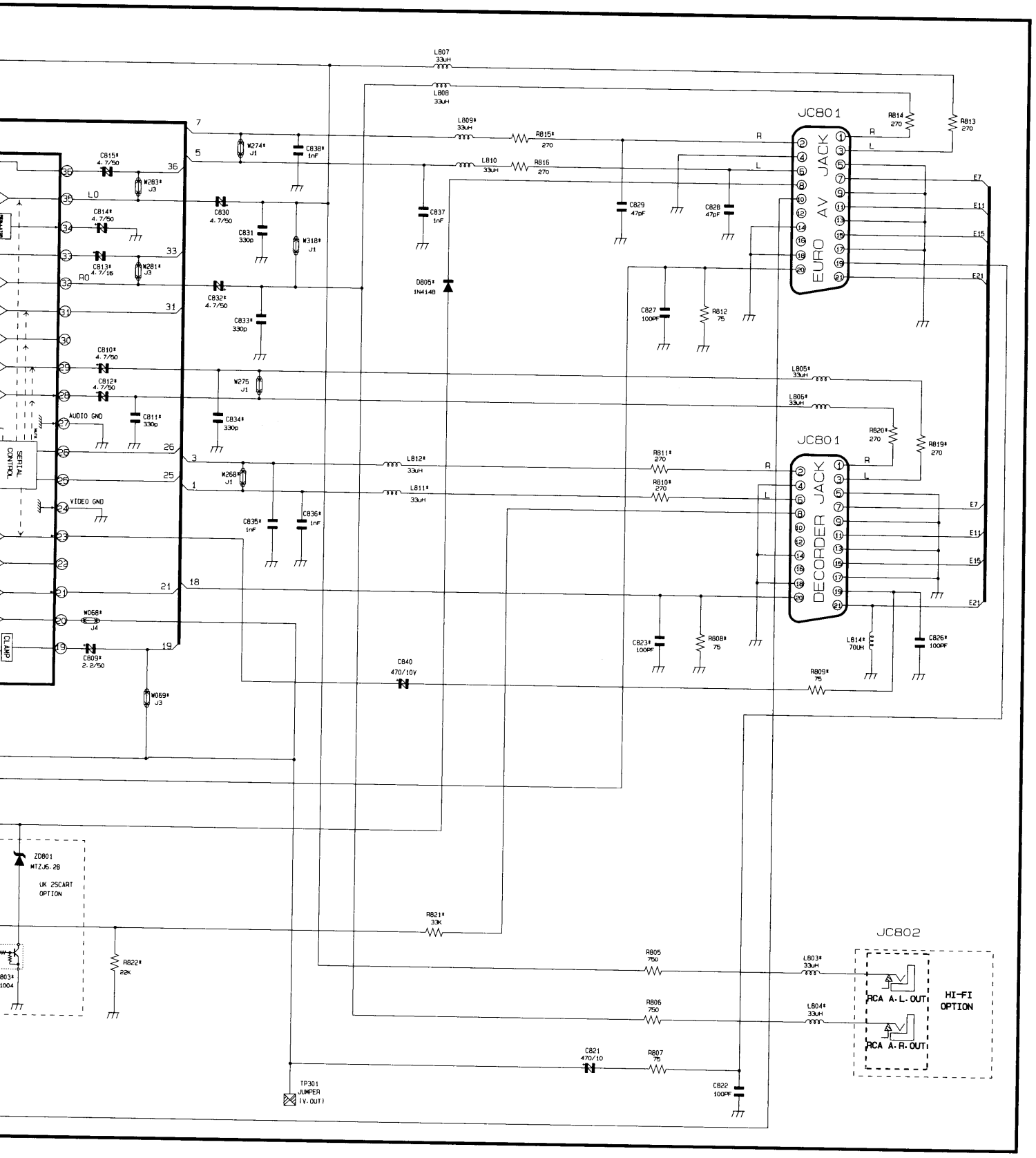

IIC DATA
IIC CLK
SIF IN
FROM/TO TM
TA1
TA2
TA3
TU.L.OUT
TU.R.OUT
FROM/TO I/O
OA1
OA2
PC 5V
PC 9V
FROM/TO POWER
PC5V
PC9V
CN4N01
1 GND 1
2 IIC DATA 2
3 IIC CLK 3
4 PC 5V 4
5 SIF IN 5
6 TU.L.OUT 6
7 TU.R.OUT 7
8 PC 9V 8
9 GND 9
10 GND 10
L4N03
C4N21 1.5P
C4N22 1.5P
XT4N01 18.432MHZ
L4N04 BEAD
XTAL_OUT
XTAL_IN
NC
TP
IC4N01
A2/NICAM : MSP341
A2 ONLY : MSP340
MAIN C.B.A
A2/NICAM C.B.A


D4N01
1N4148
100UH
L4N02
L4N03 4.7UH
C4N09 10/16V
C4N08 1.5NF
C4N07 470P
C4N10 10/16V
C4N17 470P
C4N16 47/16
C4N15 100NF
C4N14 10/16V
C4N13 100NF
C4N12 100NF
C4N11 3.3/50
R4N06 100
R4N05 100
C4N21 1.5P
C4N22 1.5P
R4N10 JUMPER
C4N19 47P
XT4N01 18.432MHZ
L4N04 BEAD
XTAL_OUT
XTAL_IN
TESTEN
NC
ANA_IN-
ANA_IN1+
AVSUP
AVSS
MONO_IN
VREFTOP
SC1_IN_R
SC1_IN_L
SC2_IN_R
SC2_IN_L
NC
NC
AGNDC
AHVSS
CAPL_M
AHVSUP
NC
SC1_OUT_L
SC1_OUT_R
VREF1
NC
NC
NC
TP
TP
TP
ADR_SEL
STANDBYQ
I2C_CL
I2C_DA
TP
TP
TP
NC
TP
TP
TP
DVSUP
DVSS
NC
NC
RESETQ
NC
NC
VREF2
DACM_R
DACM_L
TP
IC4N01
A2/NICAM : MSP3415D
A2 ONLY : MSP3405D
R4N01 1K
R4N02 100
R4N03 100
C4N18 470P
C4N03 220P
C4N01 1.5NF
C4N02 10/16V
C4N04 2.2/50V
D4N02 1N4148
L4N01 4.7UH
R4N04 27K
C4N23 1/50
C4N24 1/50
C4N05 10NF
C4N06 10NF

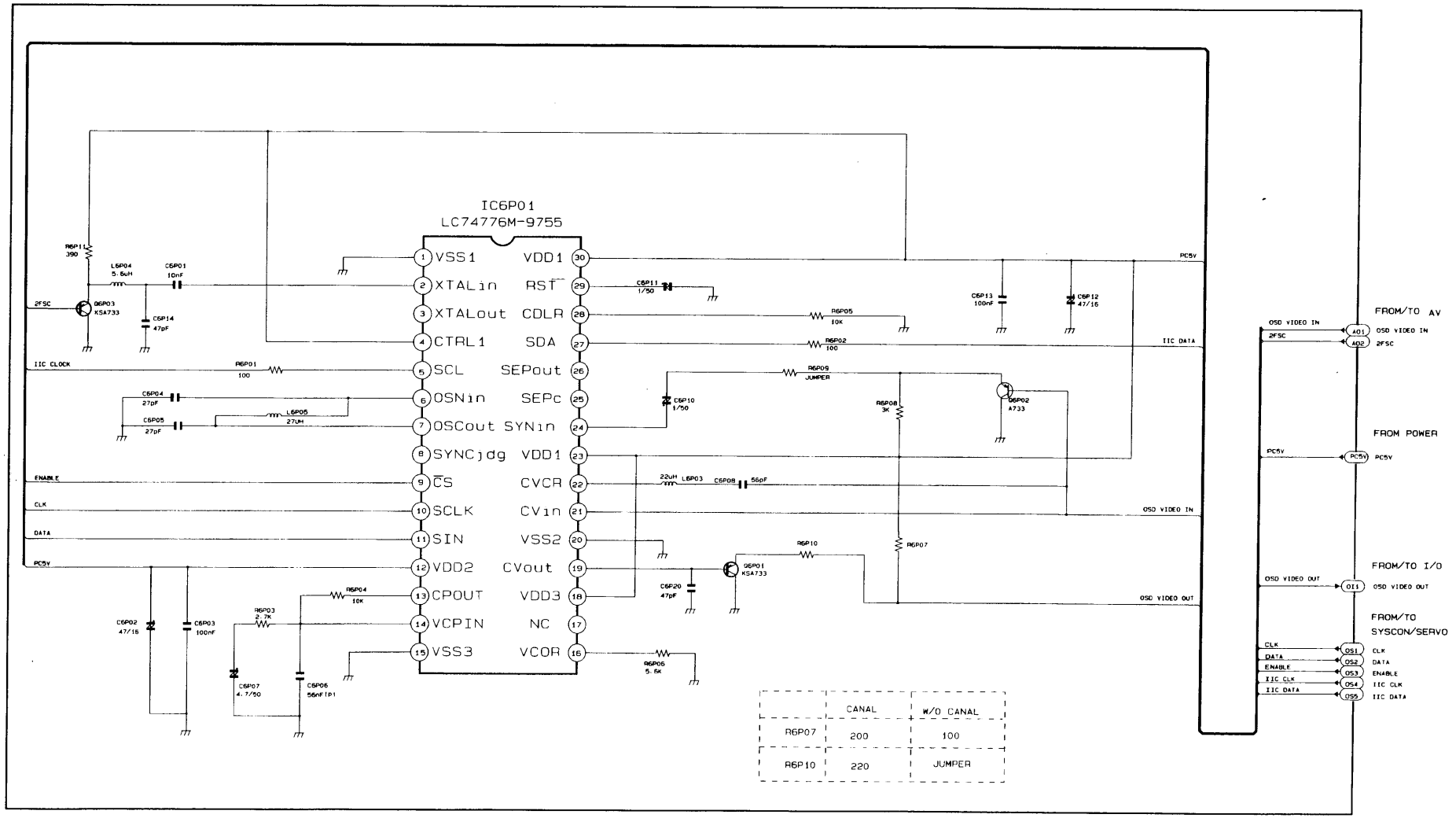
10-9 Input-Output




IC801
LA7147M
FROM/TO TM
RF A.OUT
RF V.OUT
TU V.IN
TU A.L.IN
FRON A2/NICAM
TU A.L.IN
TU A.R.IN
FROM/TO HI-FI
RF A.OUT
A.R.OUT
A.L.OUT
C.A.L.IN
C.A.R.IN
AV.A.L.IN
AV.A.R.IN
TU A.L.IN
TU A.R.IN
AUX A.L IN
AUX A.R IN
FROM/TO A/V 1CHIP
CANAL:AV.TU A.MONO
AV A.L.IN
TU A.L.IN
VCR A.OUT
TU V.IN
AV V.IN
AUX V. IN
AUX A.L. IN
FROM OSD/VPS/PDC
OSD V.OUT
FROM/TO SYSCON/SERVO
IIC DATA
IIC CLK
SCART CTL
16:9 DET
RESET
16:9 CTL
AUX V.IN
AUX A.L.IN
AUX A.R.IN
AV LINK
FROM POWER
AL 5V
AL 12V
CLI
CRI
AVL
AVR
TL
TR
LO
RO
AUDIO GND
VIDEO GND
SERIAL CONTROL
W/O CANAL OPTION
UK 2SCART OPTION
27PIN GND
24PIN GND
SW801
RESET
W320
UK 2SCAT
W373
MONO

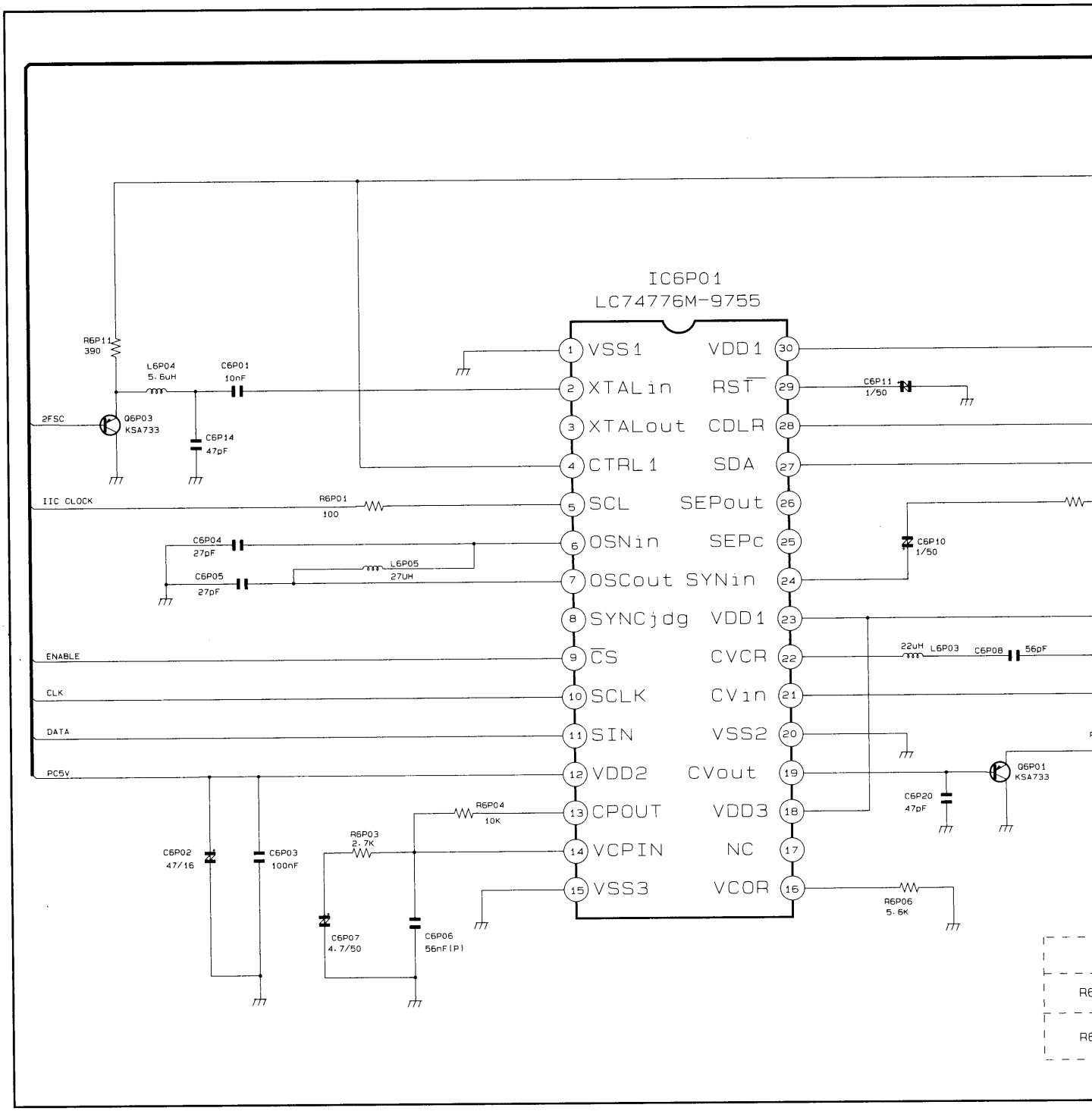

JC801
EURO AV JACK
JC801
DECORDER JACK
JC802
HI-FI OPTION
RCA A.L.OUT
RCA A.R.OUT
L807 33uH
L808 33uH
L809* 33uH
L810 33uH
L805* 33uH
L806* 33uH
L812* 33uH
L811* 33uH
L803* 33uH
L804* 33uH
L814* 70uH
R815* 270
R816 270
R814 270
R813 270
R820* 270
R819 270
R811* 270
R810* 270
R821* 33K
R822* 22K
R805 750
R806 750
R807 75
R808* 75
R809* 75
R812 75
C837 1nF
C829 47pF
C828 47pF
C827 100PF
C823* 100PF
C826* 100PF
C822 100PF
C821 470/10
C840 470/10V
C838* 1nF
C835* 1nF
C836* 1nF
C830 4.7/50
C831 330p
C832* 4.7/50
C833* 330p
C834* 330p
C811* 330p
C815* 4.7/50
C814* 4.7/50
C813* 4.7/16
C810* 4.7/50
C812* 4.7/50
C809* 2.2/50
W274* J1
W318* J1
W275 J1
W268* J1
W283* J3
W281* J3
W068* J4
W069* J3
D805* 1N4148
ZD801 MTZJ6.28
UK 2SCART OPTION
TP301 JUMPER (V.OUT)
AUDIO GND
VIDEO GND
CONTROL
SERIAL
CLAMP
LO
RO

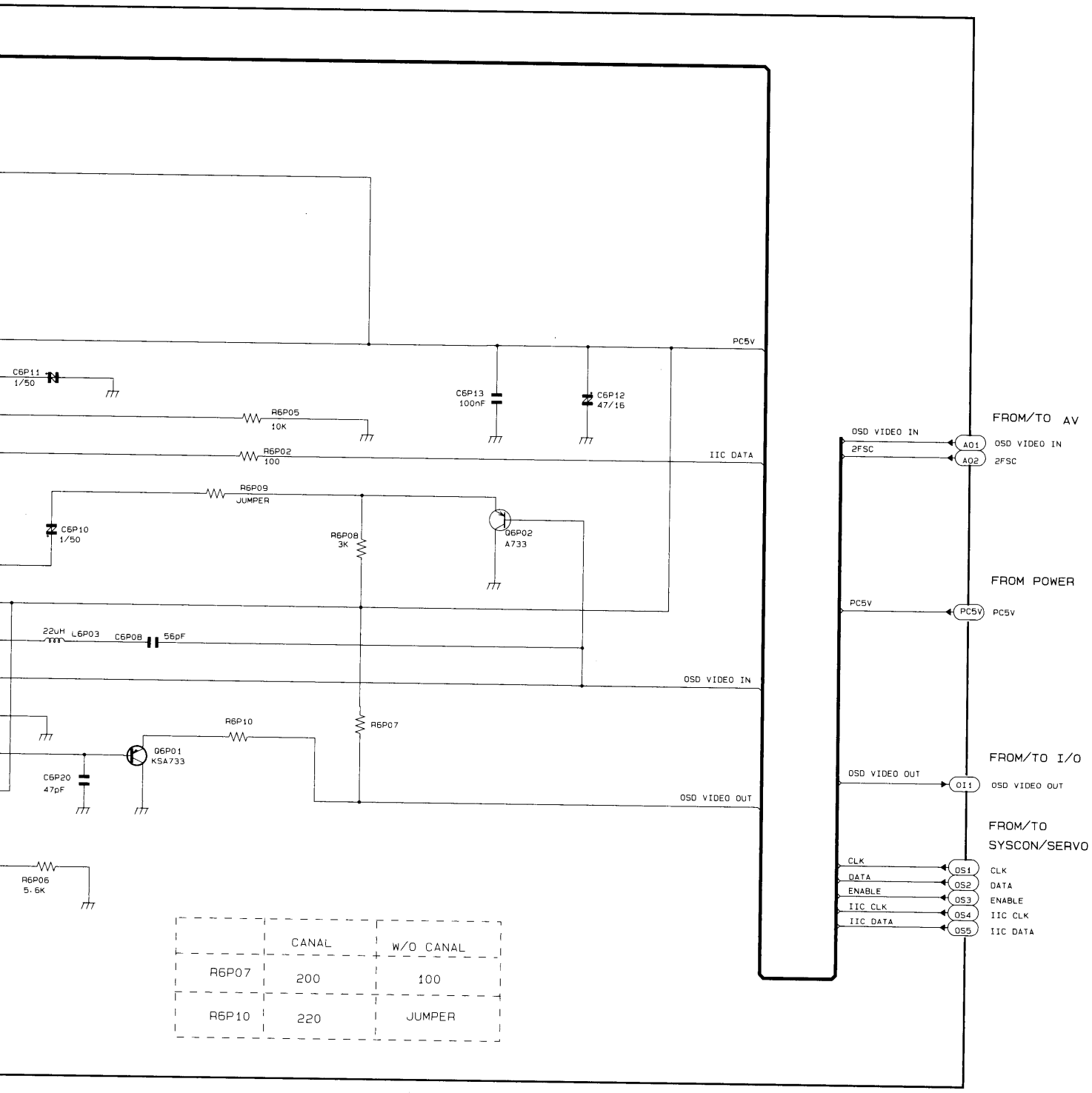
10-10 OSD/VPS/PCD



10-10 OSD/VPS/PCD

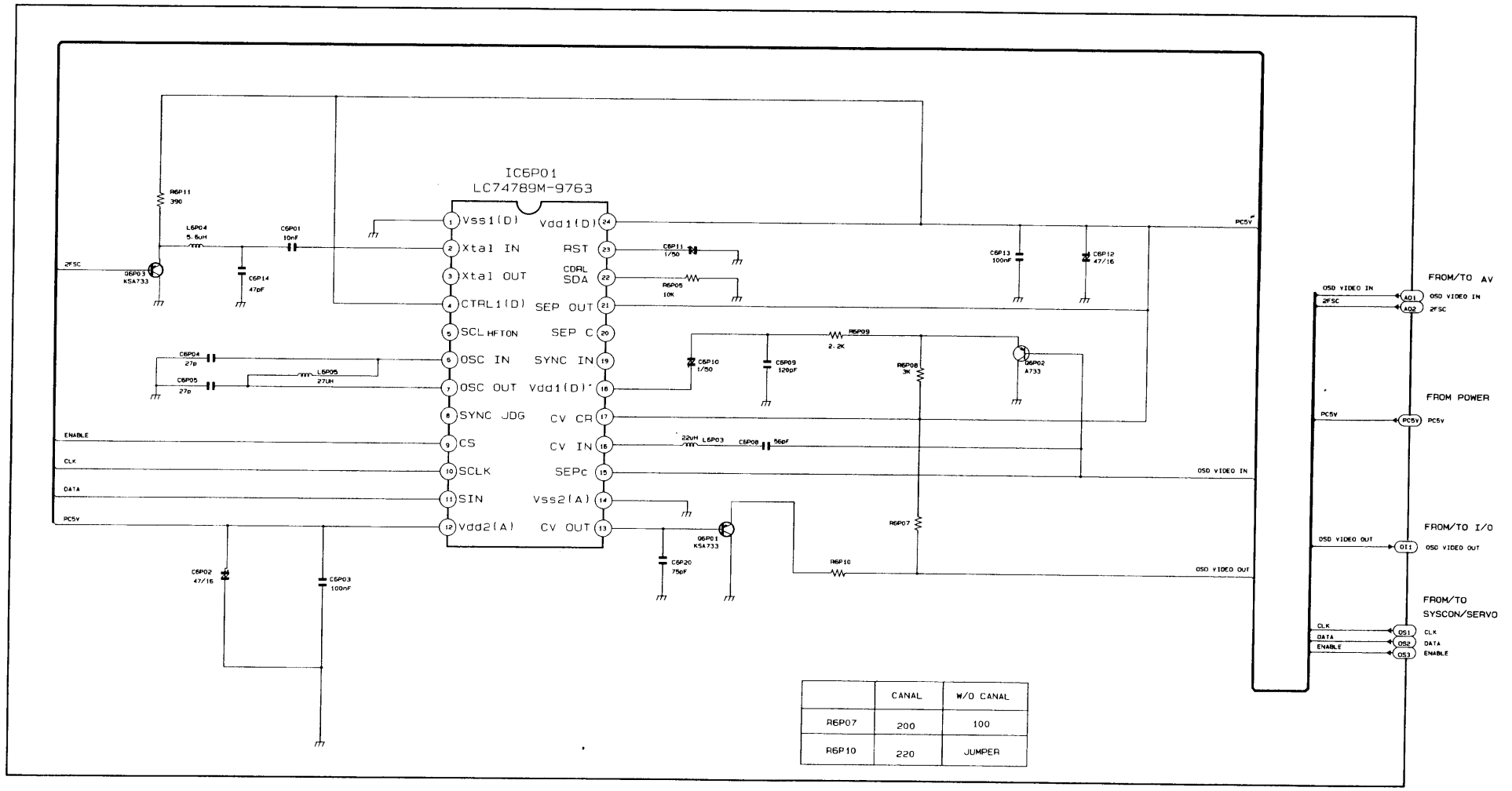
Application Models ; V-729B/709B/429B/229B/219B/729EG/719EG/429EG/229EG/219EG/209EG/729F





	CANAL	W/O CANAL
R6P07	200	100
R6P10	220	JUMPER

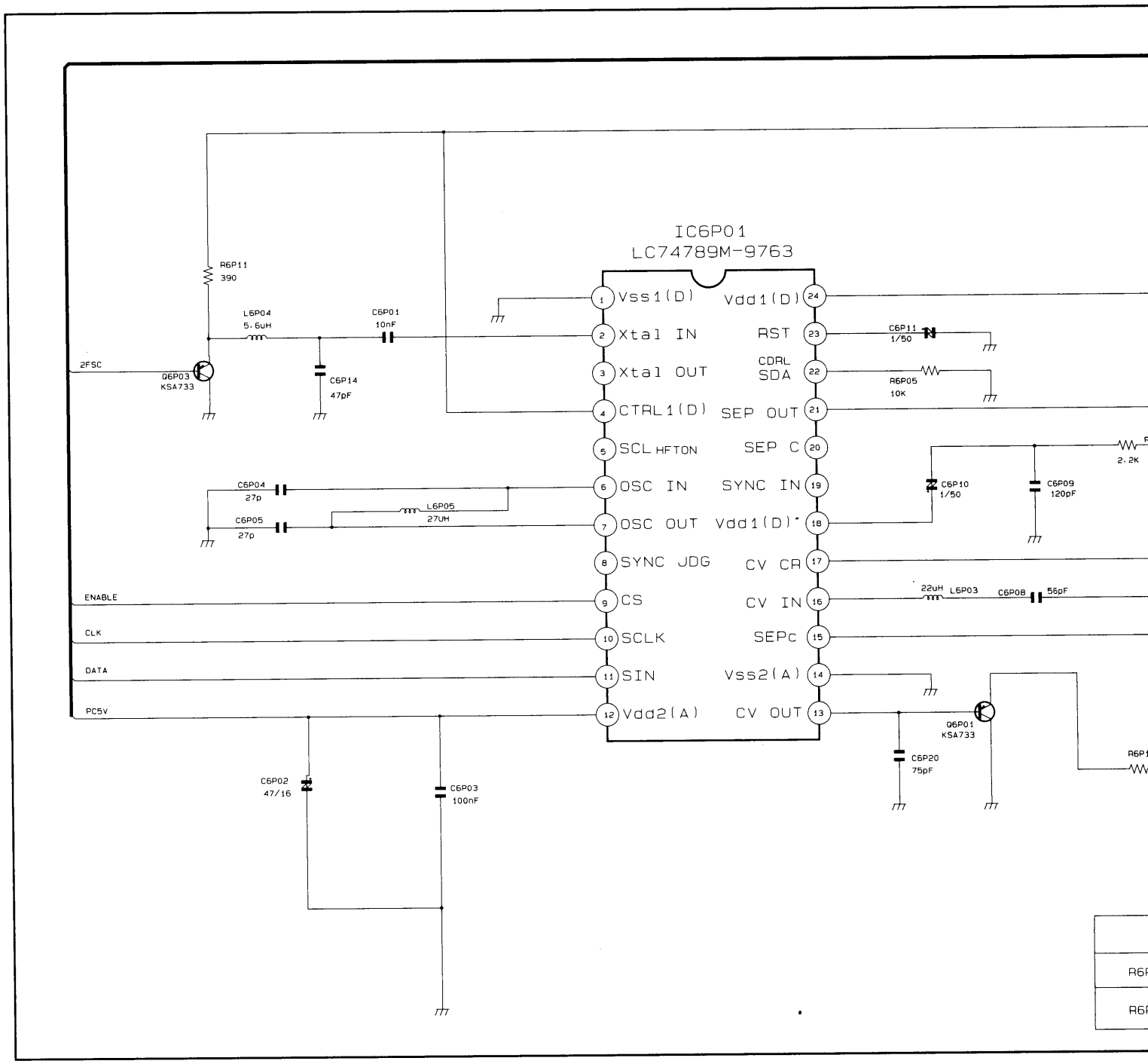
10-11 OSD (Without VPS/PDC)

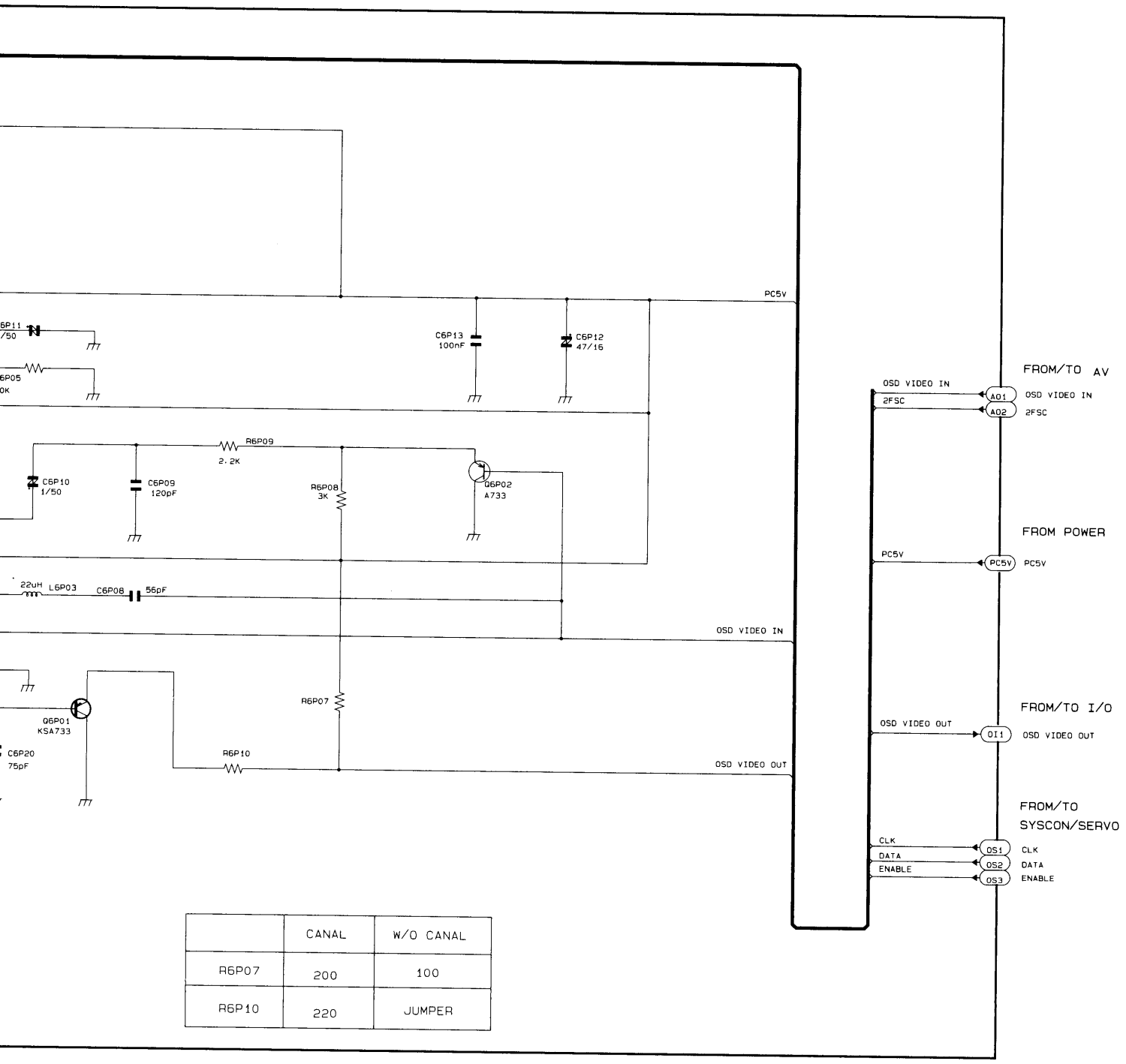


	CANAL	W/O CANAL
R6P07	200	100
R6P10	220	JUMPER

10-11 OSD (Without VPS/PDC)

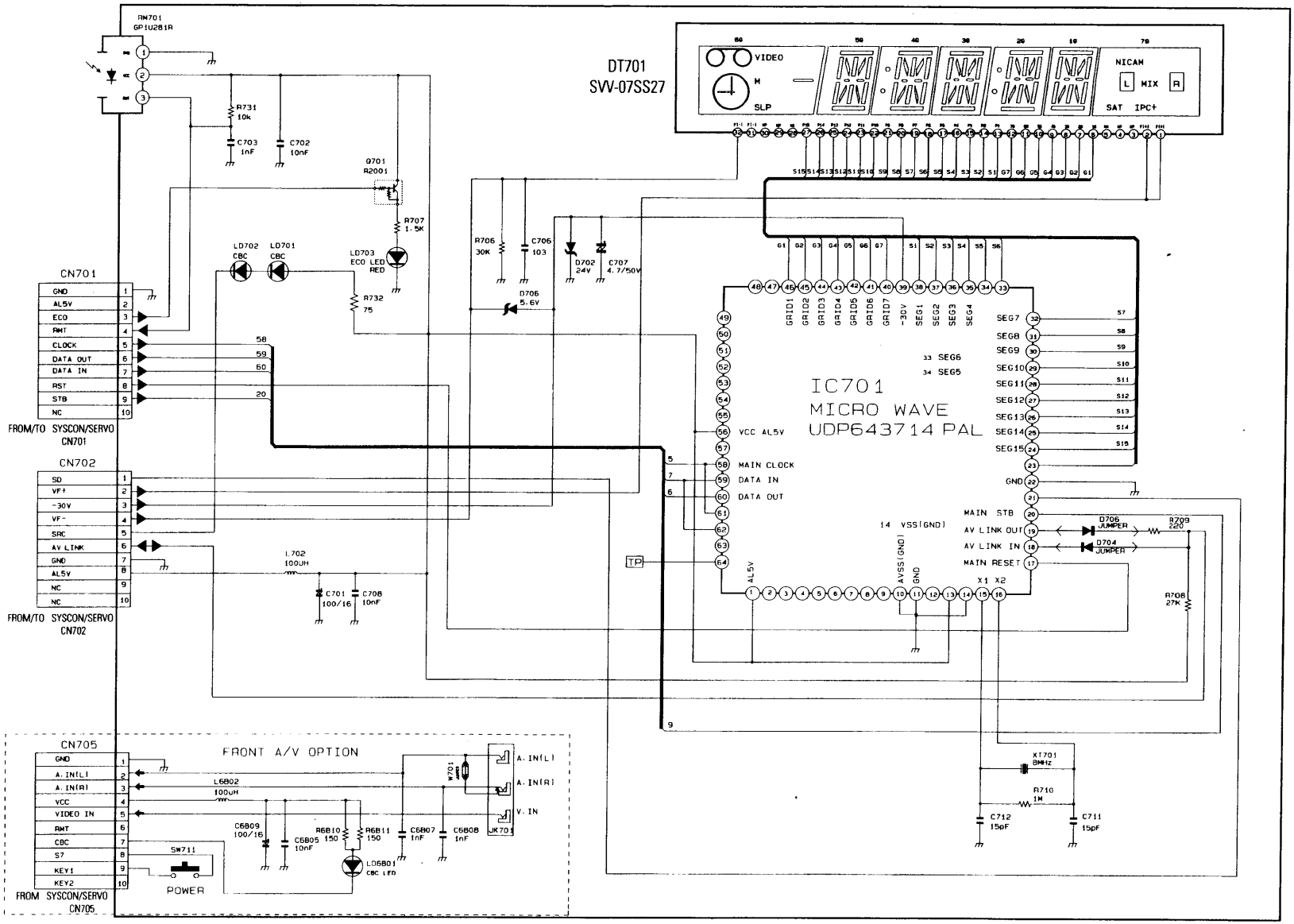
Application Models ; V-209UK/609F/419F/219F/729W/429W/209W





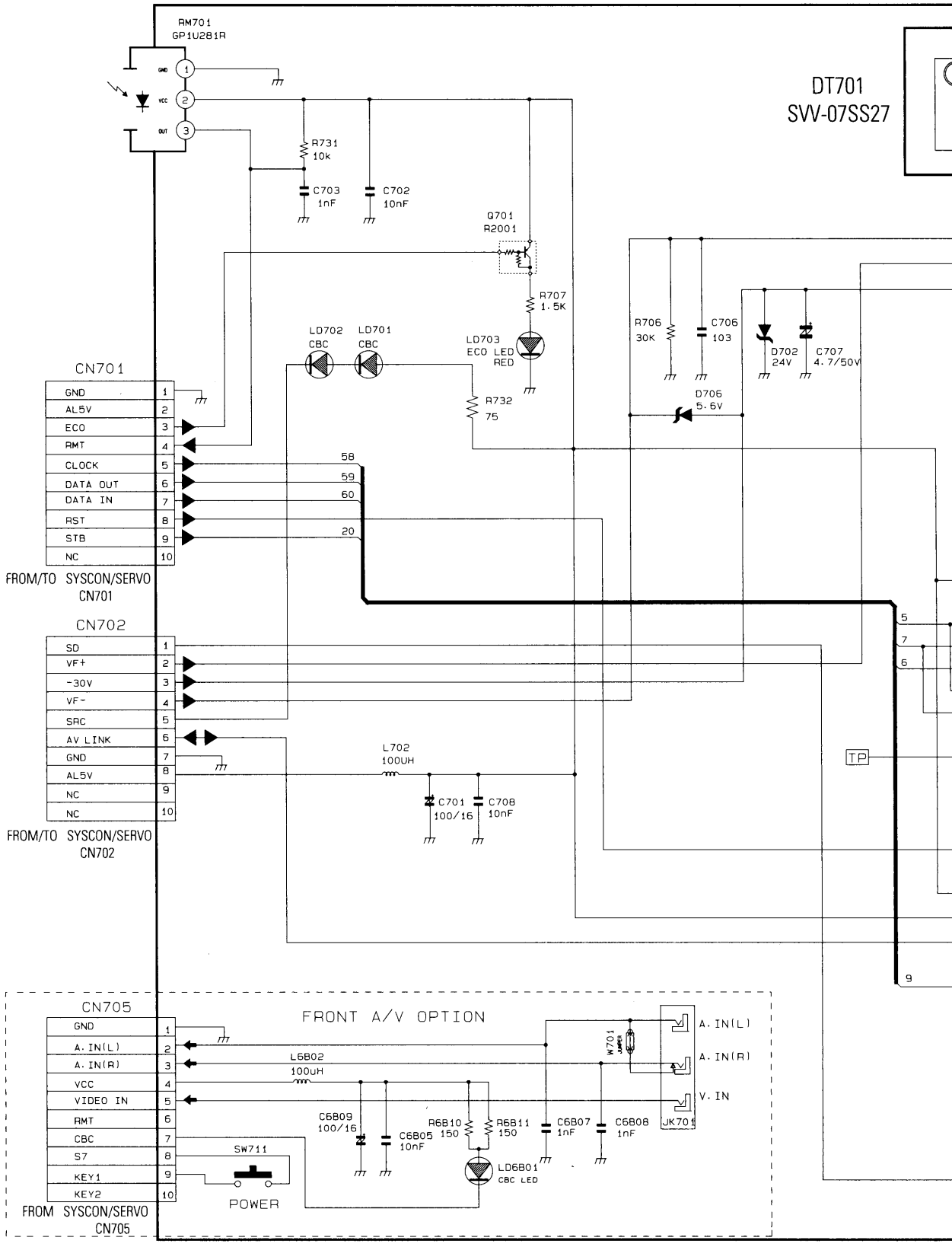
	CANAL	W/O CANAL
R6P07	200	100
R6P10	220	JUMPER

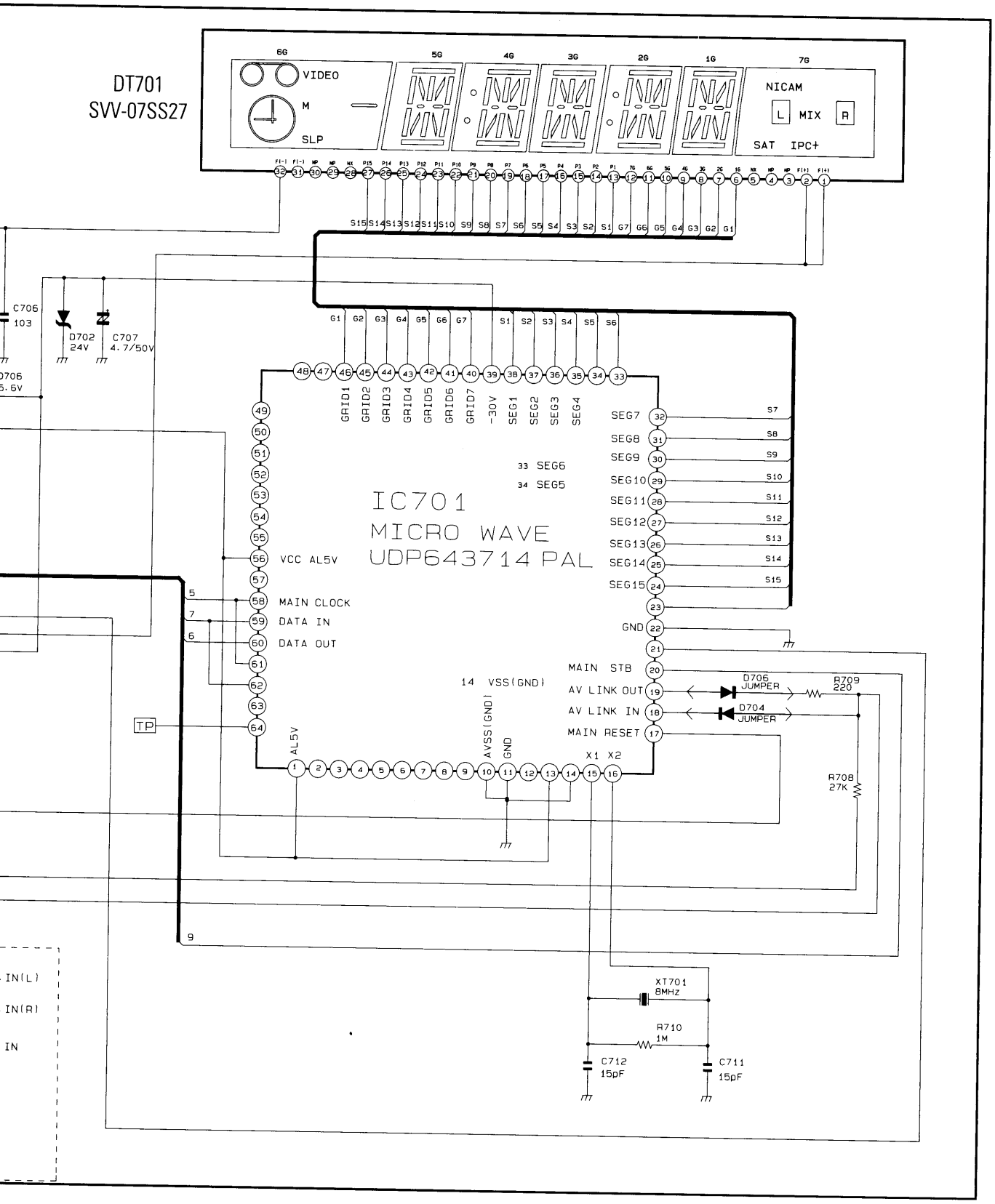
10-12 Function-Timer (With AV-Link)



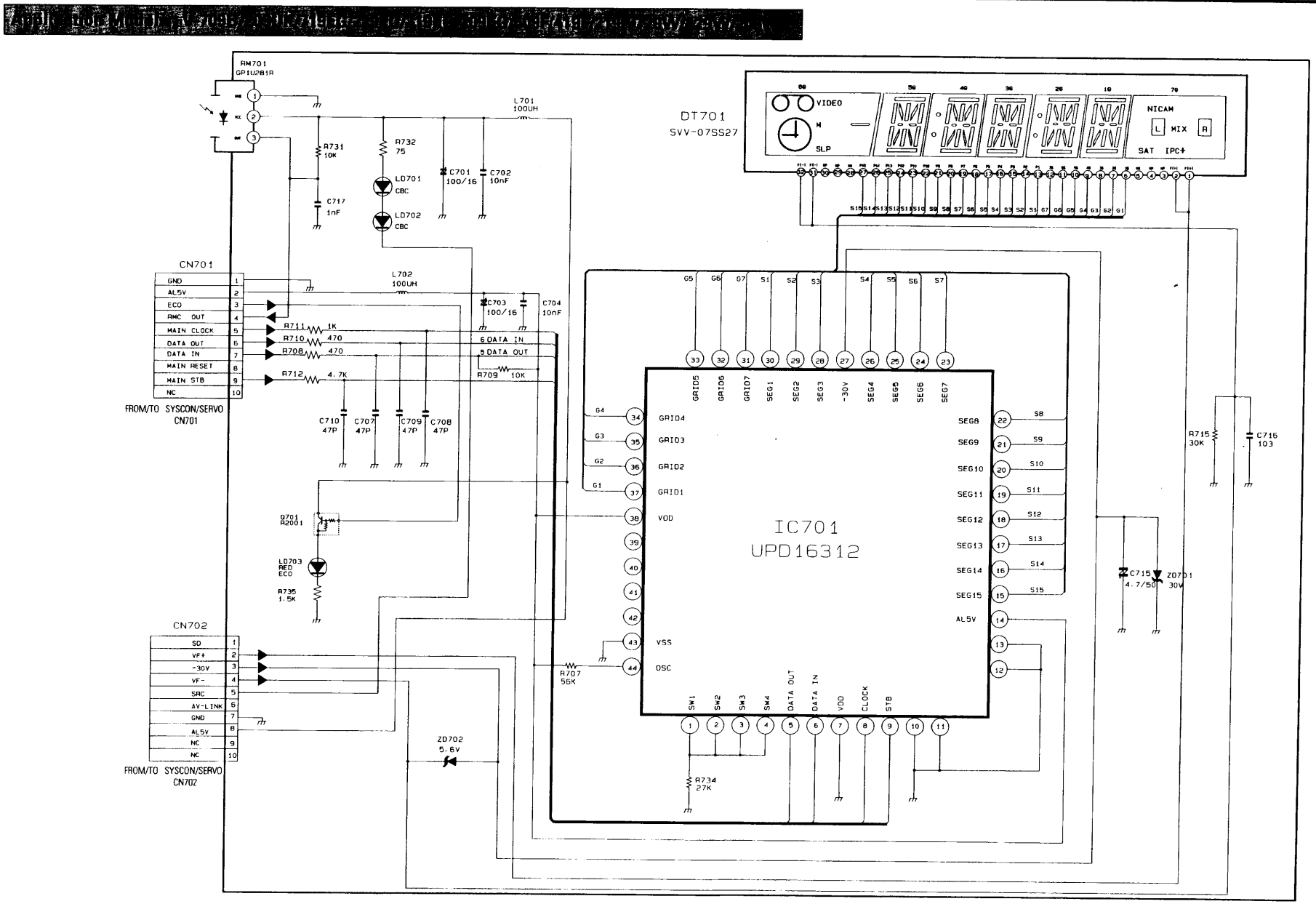
10-12 Function-Timer (With AV-Link)

Application Models ; V-729B/429B/229B/219B/729EG/429EG/729F/429F/229F

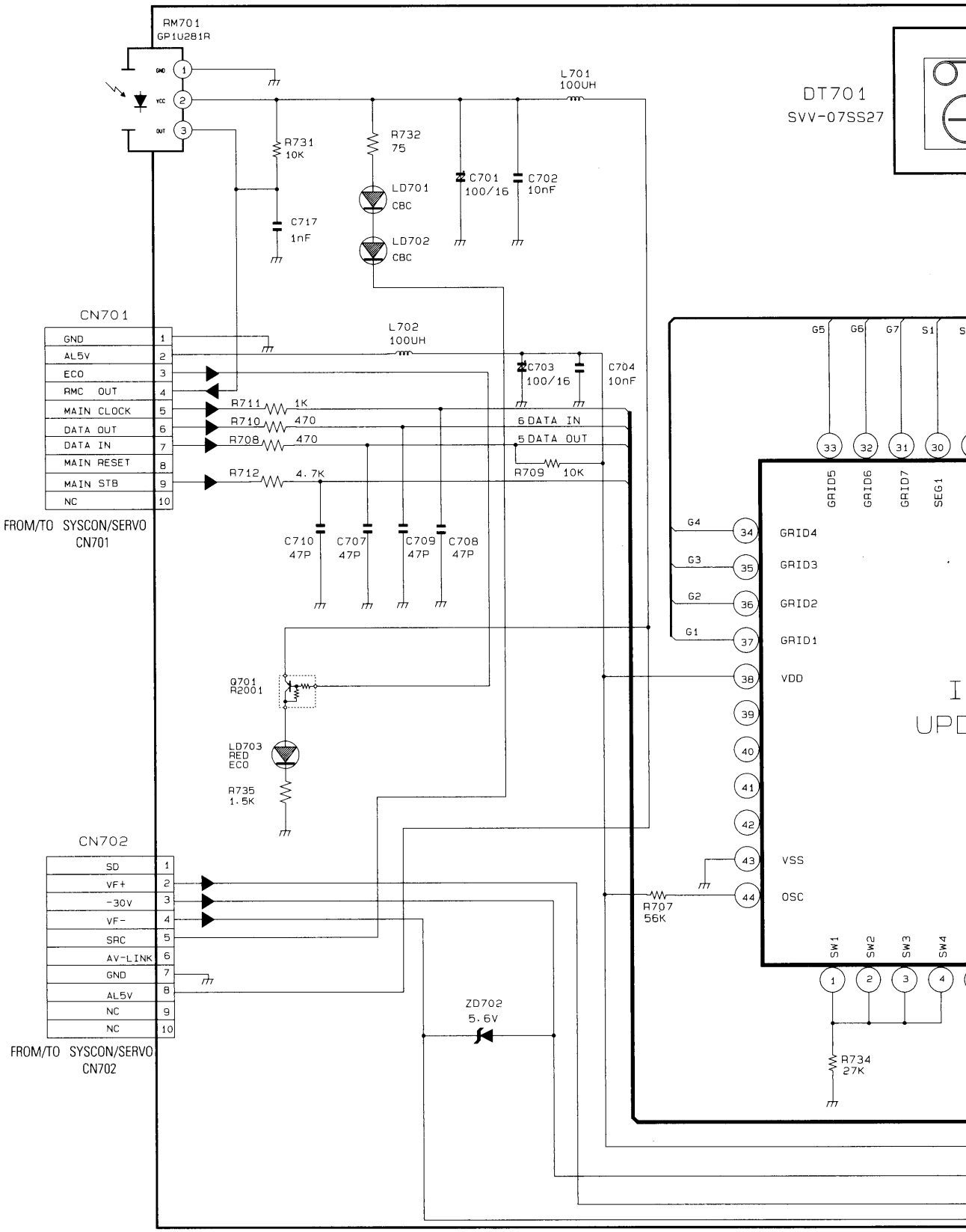



DT701
SVV-07SS27
6G
VIDEO
M
SLP
5G
4G
3G
2G
1G
7G
NICAM
L
MIX
R
SAT
IPC+
S15 S14 S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2 S1 G7 G6 G5 G4 G3 G2 G1
C706
103
D702
24V
C707
4.7/50V
G1 G2 G3 G4 G5 G6 G7 S1 S2 S3 S4 S5 S6
GRID1 GRID2 GRID3 GRID4 GRID5 GRID6 GRID7 -30V SEG1 SEG2 SEG3 SEG4
33 SEG6
34 SEG5
IC701
MICRO WAVE
UDP643714 PAL
SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15
S7 S8 S9 S10 S11 S12 S13 S14 S15
VCC AL5V
MAIN CLOCK
DATA IN
DATA OUT
GND
MAIN STB
AV LINK OUT
AV LINK IN
MAIN RESET
D706
JUMPER
R709
220
D704
JUMPER
R708
27K
14 VSS(GND)
AVSS(GND)
AL5V
X1 X2
TP
XT701
8MHz
R710
1M
C712
15pF
C711
15pF
IN(L)
IN(R)
IN

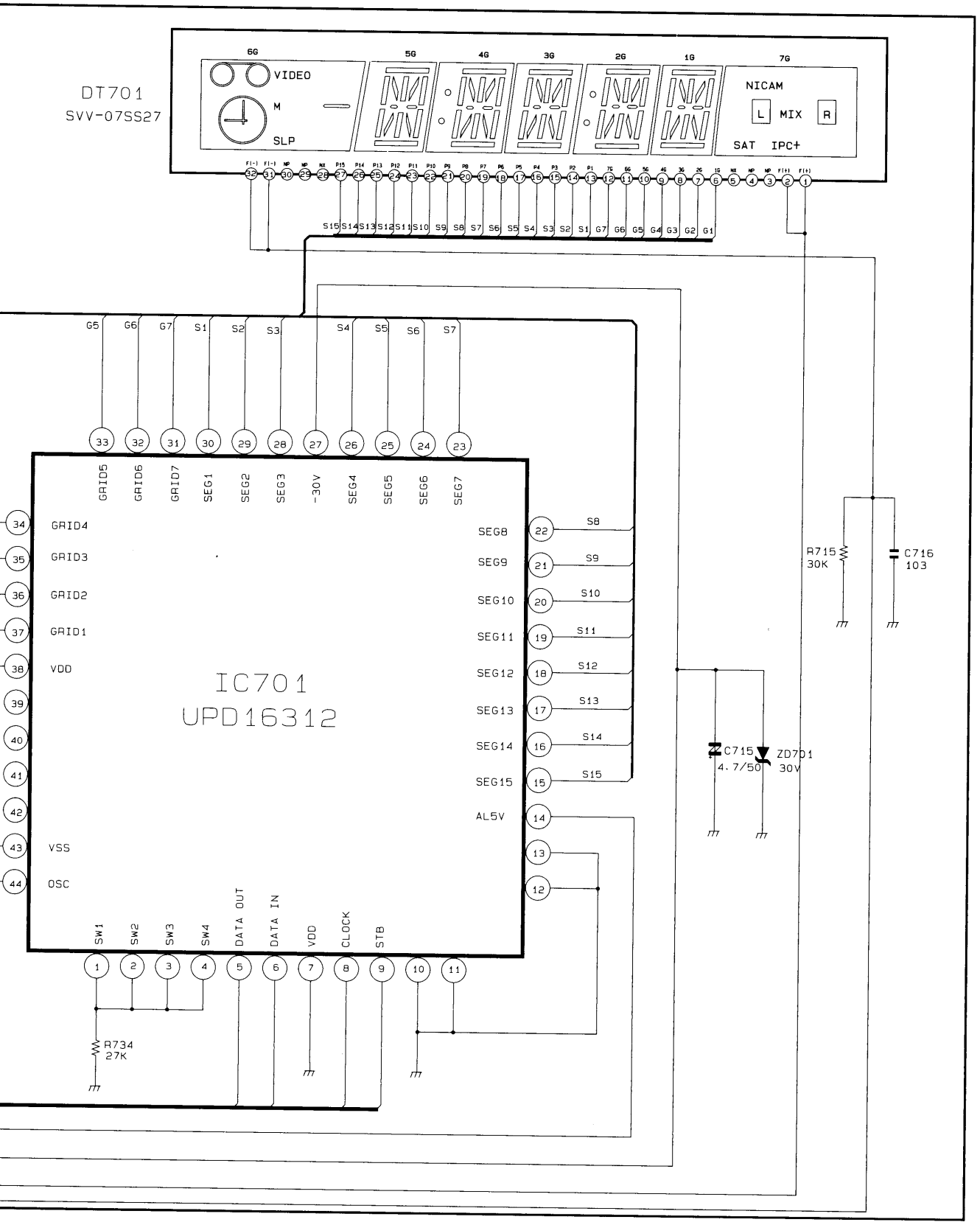
10-13 Function-Timer (Without AV-Link)



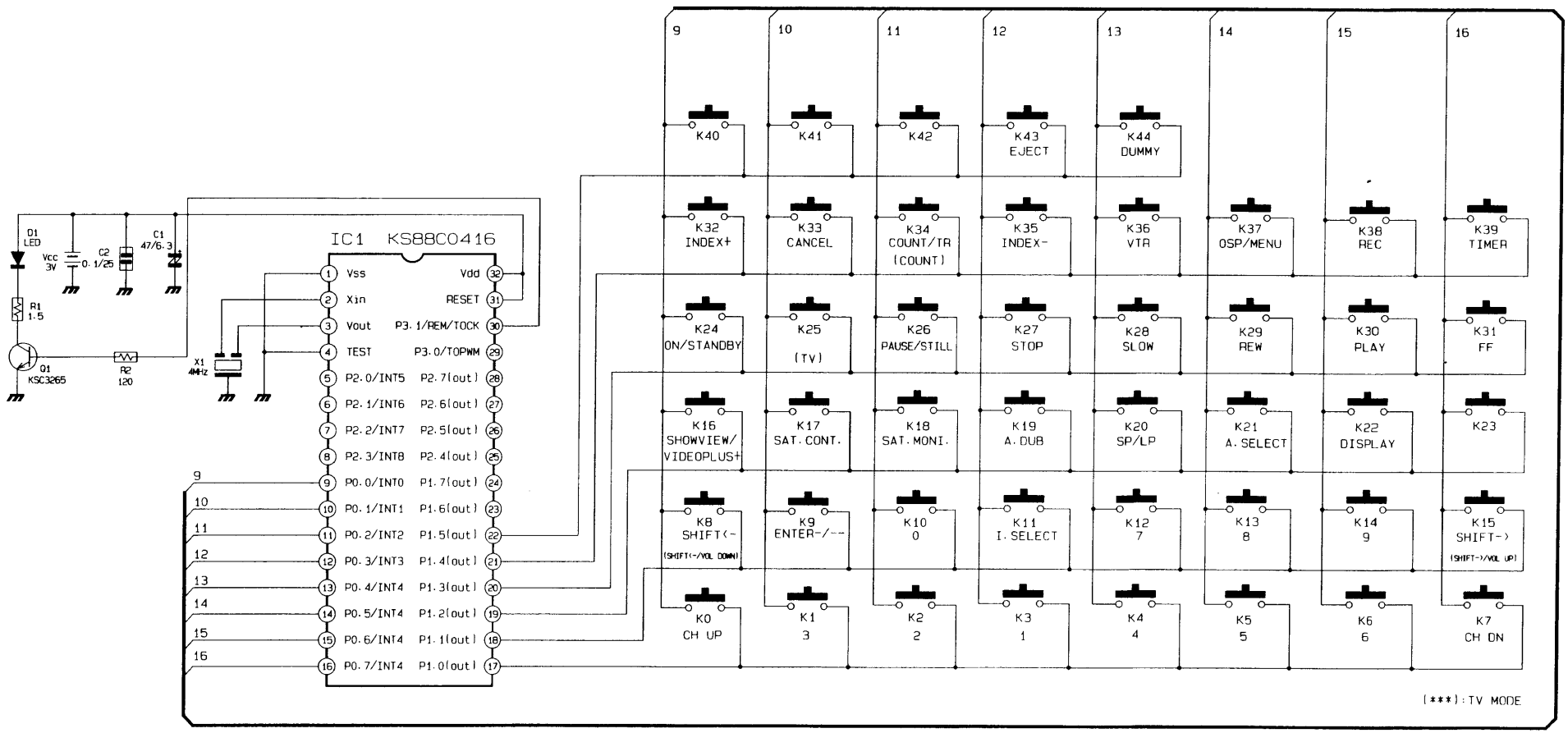
Application Models ; V-709B/209UK/719EG/229EG/219EG/209EG/609F/419F/219F/729W/429W/209W



F/729W/429W/209W

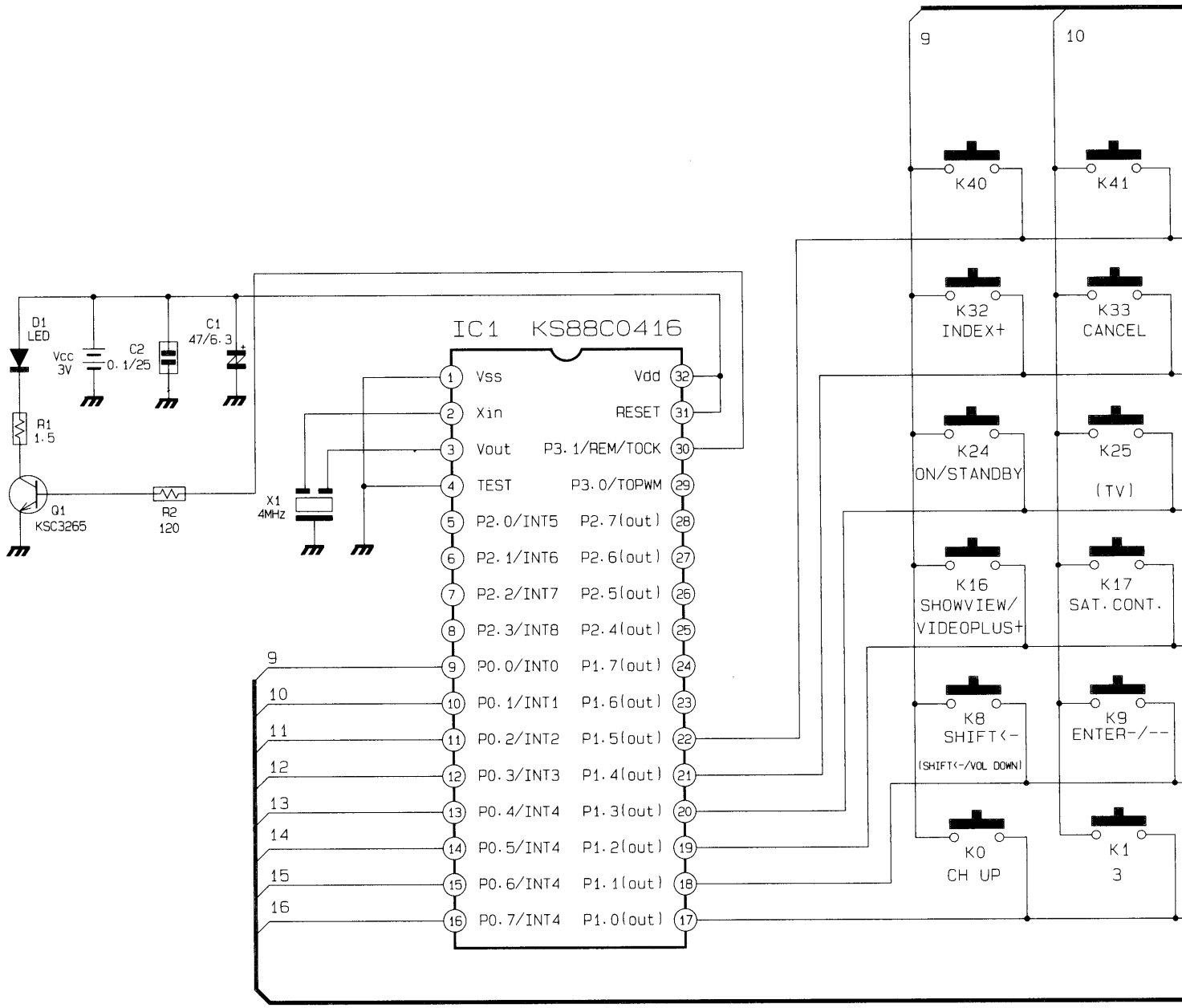


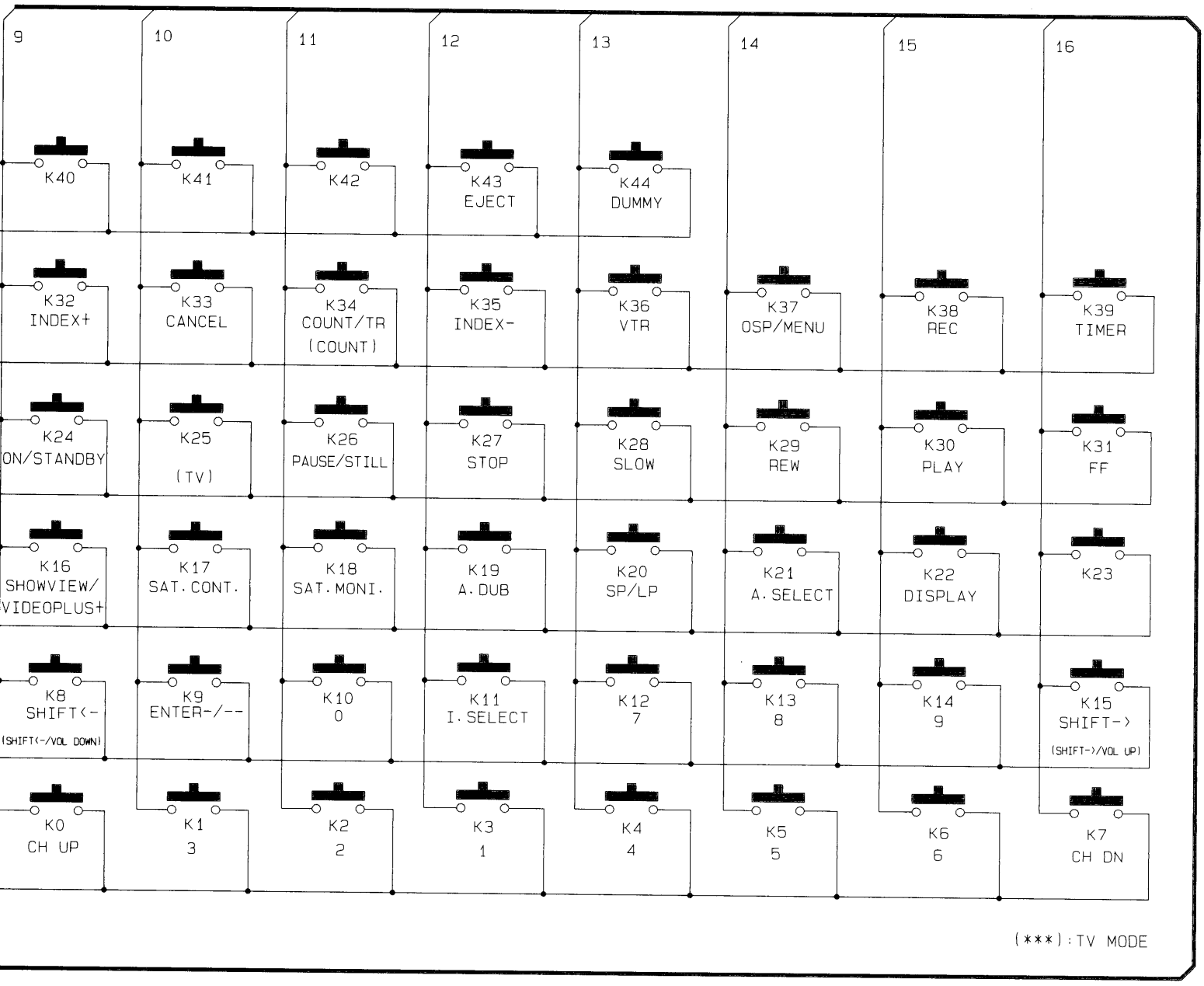
10-14 Remote-Control (Multi)



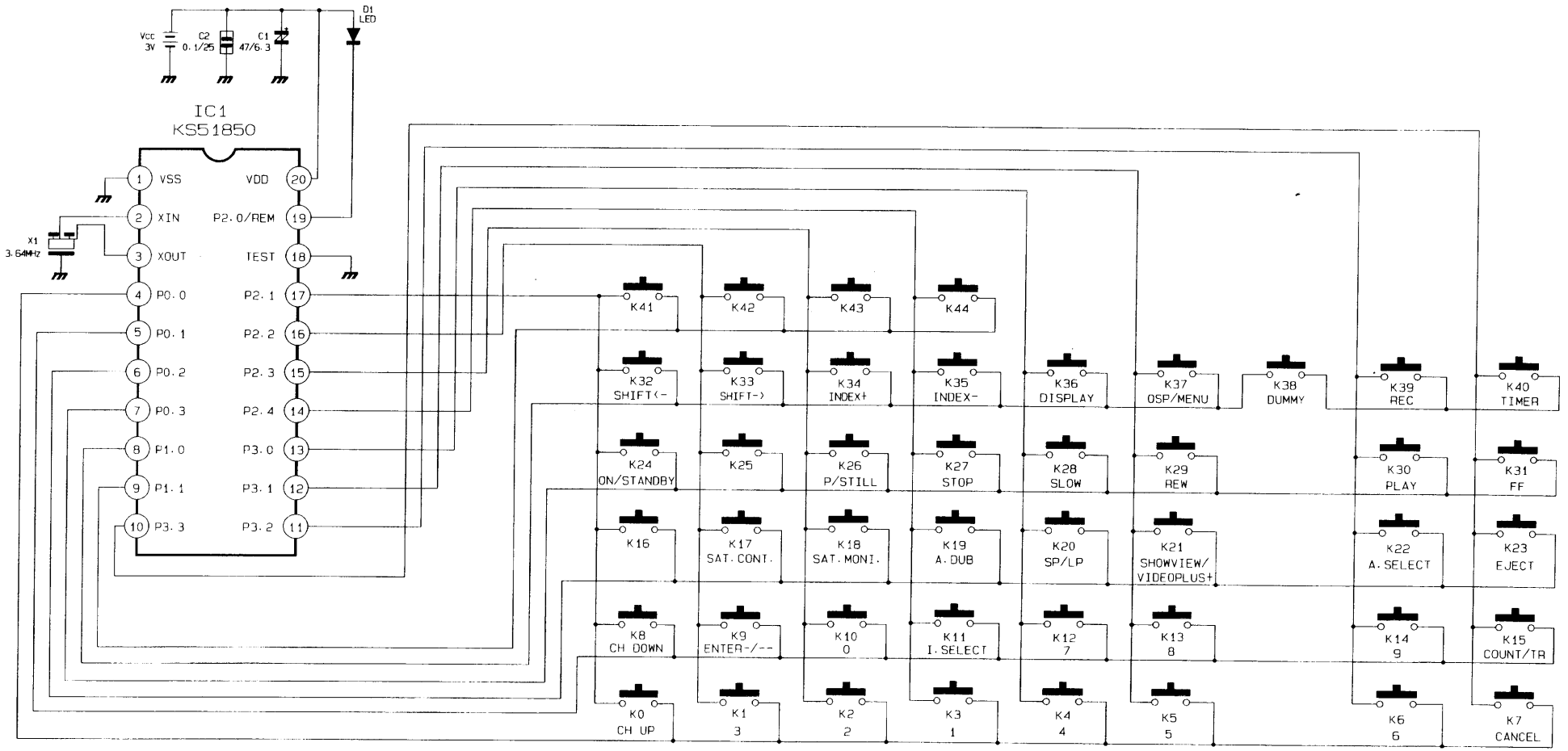
10-14 Remote-Control (Multi)

Application Models ; V-729B/429B/229B/729EG/429EG/229EG/429W

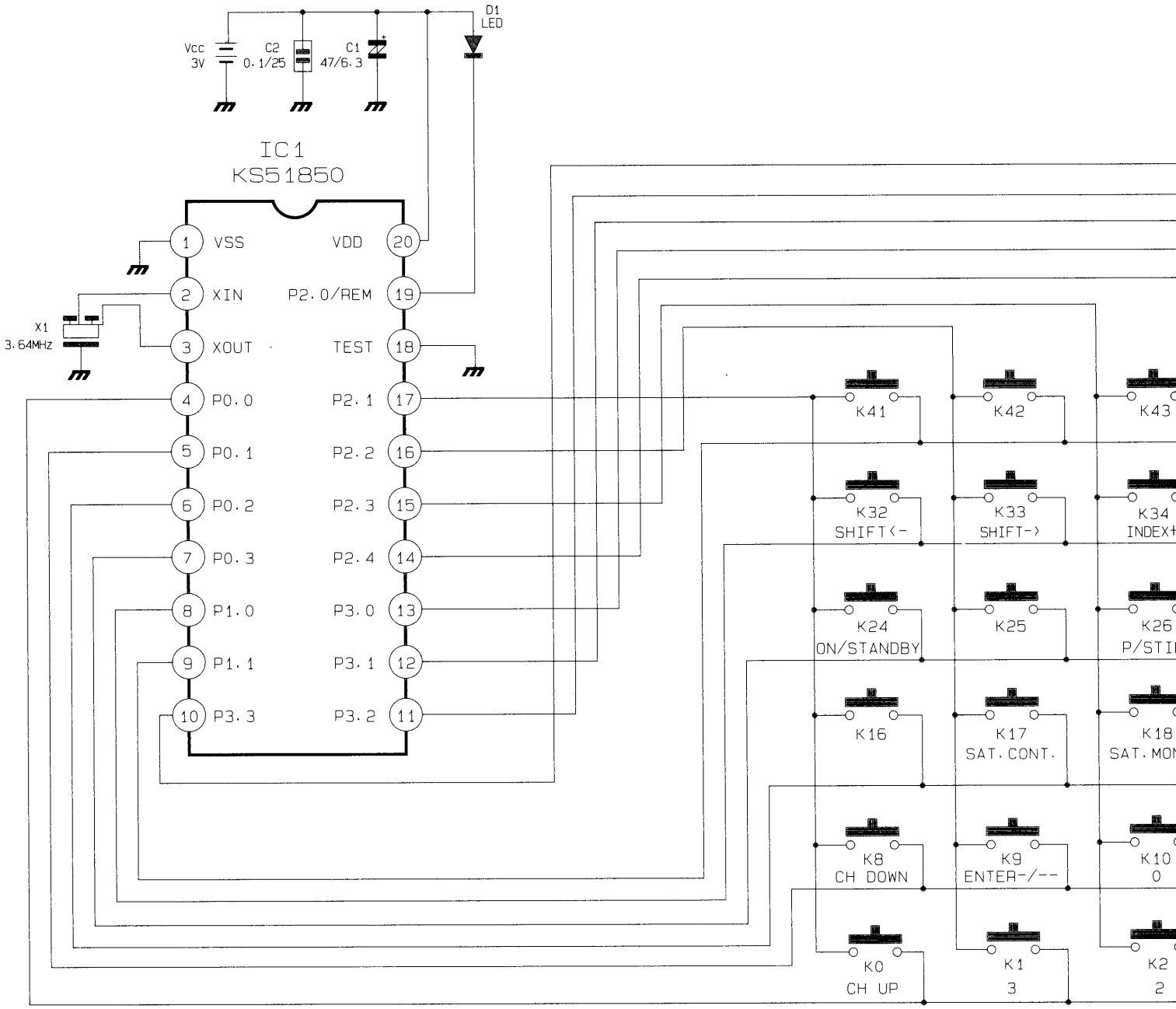



9
10
11
12
13
14
15
16
K40
K41
K42
K43
EJECT
K44
DUMMY
K32
INDEX+
K33
CANCEL
K34
COUNT/TR
(COUNT)
K35
INDEX-
K36
VTR
K37
OSP/MENU
K38
REC
K39
TIMER
K24
ON/STANDBY
K25
(TV)
K26
PAUSE/STILL
K27
STOP
K28
SLOW
K29
REW
K30
PLAY
K31
FF
K16
SHOWVIEW/
VIDEOPLUS+
K17
SAT. CONT.
K18
SAT. MONI.
K19
A. DUB
K20
SP/LP
K21
A. SELECT
K22
DISPLAY
K23
K8
SHIFT<-
(SHIFT<-/VOL DOWN)
K9
ENTER-/--
K10
0
K11
I. SELECT
K12
7
K13
8
K14
9
K15
SHIFT->
(SHIFT->/VOL UP)
K0
CH UP
K1
3
K2
2
K3
1
K4
4
K5
5
K6
6
K7
CH DN
(***) : TV MODE

10-15 Remote-Control (VCR Only)



Application Models ; V-709B/219B/209UK/719EG/219EG/209EG/729F/609F/429F/419F/229F/219F/729V



/419F/229F/219F/729W/209W